



NEW ZEALAND

Official
Year-Book,

1911.



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THE
NEW ZEALAND
OFFICIAL YEAR-BOOK,
1911.

(TWENTIETH YEAR OF ISSUE.)

PREPARED UNDER INSTRUCTIONS FROM

THE RIGHT HON. SIR J. G. WARD, P.C., K.C.M.G.,
BART., PRIME MINISTER,

BY

M. FRASER, GOVERNMENT STATISTICIAN.



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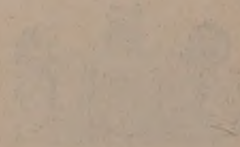
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ADDENDA ET CORRIGENDA.

THE changes recorded hereunder have in some cases occurred since the pages referred to were printed and published in the form of advance sheets.

- Page 30.—Parliaments : Fifteenth Parliament dissolved 15th November, 1905, not 29th November, 1905.
- Page 34.—Foreign Consuls : Consul for German Empire for Province of Canterbury and County of Westland, at Christchurch, Karl Joosten ; Vice-Consul for Denmark, at Auckland, Paul Maximilian Hansen ; Consul for Spain, at Melbourne, with jurisdiction in the Commonwealth and New Zealand, Senor Don Mario Pinies y Bayona ; Consul for China, at Wellington, Chow Si Lanchu ; Consul-General for German Empire, at Sydney, for Commonwealth of Australia, British New Guinea, New Zealand, Fiji Islands, and British Islands in the Southern Seas situated between Tonga and the French Possessions, Richard Kiliani ; Consul for Peru, at Auckland, Ambrose Millar.
- Page 36.—Honours held : Baronet—Right Hon. Sir Joseph George Ward, K.C.M.G. (1911). Knights Commander of the Most Distinguished Order of Saint Michael and Saint George—Hon. Sir James Carroll (1911) ; Hon. Sir John George Findlay, K.C., LL.D. (1911). Knights Bachelor—Hon. Sir Arthur Robert Guinness (1911) ; Sir Joshua Strange Williams (1911). Companions of the Most Distinguished Order of Saint Michael and Saint George—Colonel Robert Joseph Collins, I.S.O. (1911) ; Frederick Fitchett, LL.D., M.A. (1911). Companions Imperial Service Order (I.S.O.)—Horatio John Hooper Blow (1911) ; Edward Tregear (1911).
- Page 36.—H.M. Trade Commissioner in New Zealand, W. G. Wickham, Esq., 9 Grey Street, Wellington.
- Page 38.—Persons allowed to retain the title of "Honourable" within His Majesty's Dominions : Hon. George Fowlds (1911).
- Page 470.—Mineral production (value) of Australasia to end of 1909. Total for Tasmania should read £32,368,587.
- Page 44.—Agents-General and High Commissioners for New Zealand : Isaac Earl Featherston, Esq., appointed Agent-General under the Immigration and Public Works Act, 1870, by Warrant dated 5th April, 1871. Appointment to date from 25th March, 1871. (*Gazette*, 1871, page 155.) (Note.—Sir W. Tyrone Power was appointed on 20th June, 1876, by the Crown Agents as temporary Agent-General on the death of Dr. Featherston.) Sir Julius Vogel, K.C.M.G., appointed Agent-General under the Immigration and Public Works Act, 1870, by Warrant dated 19th September, 1876. Appointment to date from 9th September, 1876, *vice* I. E. Featherston, deceased. (*Gazette*, 1876, page 721.) Sir Francis Dillon Bell appointed Agent-General under the Public Revenues Act, 1878, by Warrant dated 7th December, 1880, *vice* Sir Julius Vogel, resigned. (*Gazette*, 1881, page 311.) Westby Brook Perceval, Esq., appointed Agent-General under the

Public Revenues Act, 1891, by Warrant dated 25th September, 1891, *vice* Sir F. D. Bell. (*Gazette*, 1891, page 1071.) The Honourable William Pember Reeves appointed Agent-General under the Public Revenues Act, 1891, by Warrant dated 23rd December, 1895, *vice* Sir W. B. Perceval. (*Gazette*, 1896, page 50.) Appointed High Commissioner under the High Commissioner Act, 1904, by Warrant dated 14th June, 1905. (*Gazette*, 1905, page 1509.) Reappointed High Commissioner as from 14th June, 1908. (*Gazette*, 1908, page 1921.) The Hon. William Hall-Jones appointed from 1st December, 1908, *vice* Hon. W. P. Reeves. Assumed office 18th January, 1909. (*Gazette*, 1909, page 27.) Appointment extended to 31st December, 1911. (*Gazette*, 1911, page 2720.)

Page 200.—No-license Districts: The following are the districts in which No-license is in force, and the dates on which it came into effect—
 Clutha, 1st July, 1894; Ashburton, 1st July, 1903; Maitaia, 1st July, 1903; Grey Lynn, 1st July, 1906; Oamaru, 1st July, 1906; Invercargill, 1st July, 1906; Eden, 1st July, 1909; Ohinemuri, 1st July, 1909; Masterton, 1st July, 1909; Bruce, 1st July, 1909; Wellington South, 1st July, 1909.

Page 399.—To follow “Habitual Criminals and Offenders” :—

PRISONS BOARD

(Appointed under Section 9 of the Crimes Amendment Act, 1910).

His Honour Sir Robert Stout, K.C.M.G., Chief Justice of New Zealand; Frank Geoffrey Burton Waldegrave, Esq., Under-Secretary for Justice; Joseph Frank Strong Hay, Esq., Inspector-General of Mental Hospitals; John Rutherford Blair, Esq., of Wellington; Frederick George Ewington, Esq., of Auckland; George Fenwick, Esq., of Dunedin; and William Reece, Esq., of Christchurch.

Page 589.—Omit the words “and rent in arrear” in heading.



MAP OF NORTH ISLAND OF NEW ZEALAND SHOWING LAND DISTRICTS.
(See Part IV.)

THE
NEW ZEALAND OFFICIAL YEAR-BOOK.
1911.

PART I.—INTRODUCTORY: OFFICIAL.

NEW ZEALAND.

NEW ZEALAND, formerly a colony, has, since September, 1907, by Royal Proclamation, been granted the designation of "Dominion," and is referred to accordingly in this book. It consists of three main islands, with several groups of smaller islands lying at some distance from the principal group. The main islands, known as the North, the South, and Stewart Islands, have a coast-line 4,330 miles in length: North Island, 2,200 miles; South Island, 2,000 miles; and Stewart Island, 130 miles. Other islands included within the Dominion are the Chatham, Auckland, Campbell, Three Kings, Antipodes, Bounty, and Kermadec Islands. The annexation of the Cook and sundry other islands has necessitated an enlargement of the boundaries of the Dominion, which will be specially treated of further on.

New Zealand is mountainous in many parts, but has, nevertheless, large plains in both North and South Islands. In the North Island, which is highly volcanic, is situated the famous Thermal-Springs District, of which a special account will be given. The South Island is remarkable for its lofty mountains, with their magnificent glaciers, and for the deep sounds or fiords on the western coast.

New Zealand is firstly a pastoral and secondly an agricultural country. Sown grasses are grown almost everywhere, the extent of land laid down being more than thirteen millions and a half of acres. The soil is admirably adapted for receiving these grasses, and, after the bush has been burnt off, is mostly sown over without previous ploughing. In the South Island a large area is covered with native grasses, all used for grazing purposes. The large extent of good grazing-land has made the Dominion a great wool, meat,

and dairy-produce country; while its agricultural capabilities are, speaking generally, very considerable. The abundance of water and the quantity of valuable timber are other natural advantages.

New Zealand is, besides, a mining country. Large deposits of coal are met with, chiefly on the west coast of the South Island. Gold, alluvial and in quartz, is found in both Islands, the yield having been over seventy-seven millions in value to the present time. Full statistical information on this subject is given further on, compiled up to the latest dates.

DISCOVERY AND EARLY SETTLEMENT.

The first authentic account of the discovery of New Zealand is that given by Abel Jansen Tasman, the Dutch navigator. He left Batavia on the 14th August, 1642, in the yacht "Heemskirk," accompanied by the "Zeehaen" (or "Sea-hen") fly-boat. After having visited Mauritius, and discovered Tasmania, named by him "Van Diemen's Land," in honour of Anthony van Diemen, Governor of the Dutch possessions in the East Indies, he steered eastward, and on the 13th December of the same year sighted the west coast of the South Island of New Zealand, described by him as "a high mountainous country, which is at present marked in the charts as New Zealand."

Tasman, under the belief that the land he saw belonged to a great polar continent, and was part of the country discovered some years before by Schouten and Le Maire, to which the name of Staaten Land had been given, gave the same name of Staaten Land to New Zealand; but within about three months afterwards Schouten's "Staaten Land" was found to be merely an inconsiderable island. Upon this discovery being announced, the country that Tasman had called Staaten Land received again the name of "New Zealand," by which it has ever since been known. Tasman sailed along the coast to a bay, where he anchored. To this he gave the name of Murderers (since termed Massacre or Golden) Bay, on account of an unprovoked attack on a boat's crew by the Natives, and the massacre of four white men. Thence he steered along the west coast of the North Island, and gave the name of Cape Maria van Diemen to the north-western extremity thereof. After sighting the islands of the Three Kings he finally departed, not having set foot in the country.

There is no record of any visit to New Zealand after Tasman's departure until the time of Captain Cook, who, after leaving the Society Islands, sailed in search of a southern continent then believed to exist. He sighted land on the 6th October, 1769, at Young Nick's Head, and on the 8th of that month cast anchor in Poverty Bay. After having coasted round the North Island and the South and Stewart Islands—which last he mistook for part of the South Island—he took his departure from Cape Farewell on the 31st March, 1770, for Australia. He visited New Zealand again in 1773, in 1774, and in 1777.

M. de Surville, a French officer in command of the vessel "Saint Jean Baptiste," while on a voyage of discovery, sighted the north-east coast of New Zealand on the 12th December, 1769, and remained for a short time. A visit was soon after paid by another French officer, M. Marion du Fresne, who arrived on the west coast of the North Island of New Zealand on the 24th March, 1772, but was, on the 12th June following, murdered at the Bay of Islands by the Natives.

In 1793 the "Dædalus," under the command of Lieutenant Hanson, was sent by the Government of New South Wales to New Zealand, and two chiefs were taken thence to Norfolk Island. There was after this an occasional intercourse between the islands of New Zealand and the English settlements in New South Wales.

In 1814 the first missionaries arrived in New Zealand—Messrs. Hall and Kendall—who had been sent as forerunners by Mr. Marsden, chaplain to the New South Wales Government. After a short stay they returned to New South Wales, and on the 19th November of that year again embarked in company with Mr. Marsden, who preached his first sermon in New Zealand on Christmas Day, 1814. He returned to Sydney on the 23rd March, 1815, leaving Messrs. Hall and Kendall, who formed the first mission station at Rangihoua, Bay of Islands, under the auspices of the Church Missionary Society. Six years later, in 1821, the work of evangelization was put on a more durable basis; but the first station of the Wesleyan mission, established by Mr. Leigh and his wife, at the valley of the Kaeo, Whangaroa, was not taken possession of until the 10th June, 1823.

COLONIZATION.

The first attempt at colonization was made in 1825 by a company formed in London. An expedition was sent out under the command of Captain Herd, who bought two islands in the Hauraki Gulf and a strip of land at Hokianga. The attempt, however, was a failure, owing to the savage character of the inhabitants. In consequence of frequent visits of whaling-vessels to the Bay of Islands, a settlement grew up at Kororareka—now called Russell—and in 1833 Mr. Busby was appointed British Resident there. A number of Europeans gradually settled in different parts of the country, and married Native women.

In 1838 a colonization company, known as the New Zealand Company, was formed to establish settlement on systematic principles. A preliminary expedition, under the command of Colonel William Wakefield, was despatched from England on the 12th May, 1839, and arrived in New Zealand in the following August. Having purchased land from the Natives, Colonel Wakefield selected the shore of Port Nicholson, in Cook Strait, as the site of the first settlement. On the 22nd January, 1840, the first body of immigrants arrived, and founded the town of Wellington. About the same time

—namely, on the 29th January, 1840—Captain Hobson, R.N., arrived at the Bay of Islands, empowered, with the consent of the Natives, to proclaim the sovereignty of Queen Victoria over the Islands of New Zealand, and to assume the government thereof. A compact called the Treaty of Waitangi, to which in less than six months five hundred and twelve names were affixed, was entered into, whereby all rights and powers of sovereignty were ceded to the Queen, all territorial rights being secured to the chiefs and their tribes. New Zealand was then constituted a dependency of the Colony of New South Wales, but on the 3rd May, 1841, was proclaimed a separate colony. The seat of Government had been previously established at Waitemata (Auckland), round which a settlement was formed.

The New Zealand Company having decided to form another settlement, to which the name of "Nelson" was to be given, despatched a preliminary expedition from England in April, 1841, for the purpose of selecting a site. The spot chosen was the head of Blind Bay, where a settlement was established. About the same time a number of pioneers arrived in Taranaki, despatched thither by the New Plymouth Company, a colonizing society which had been formed in England, and had bought 50,000 acres of land from the New Zealand Company.

The next important event in the progress of colonization was the arrival at Port Chalmers, on the 23rd March, 1848, of the first of two emigrant ships sent out by the Otago Association for the foundation of a settlement by persons belonging to or in sympathy with the Free Church of Scotland.

In 1849 the "Canterbury Association for founding a Settlement in New Zealand" was incorporated. On the 16th December, 1850, the first emigrant ship despatched by the association arrived at Port Cooper, and the work of opening up the adjoining country was set about in a systematic fashion, the intention of the promoters being to establish a settlement complete in itself, and composed entirely of members of the then United Church of England and Ireland.

THE MAORIS.

Prior to the colonization of New Zealand by Europeans, the earliest navigators and explorers found a race of people already inhabiting both Islands. Papers written in 1874 by Mr. (afterwards Sir) William Fox and Sir Donald McLean (then Native Minister) state that at what time the discovery of these Islands was made by the Maoris, or from what place they came, are matters of tradition only, and that much has been lost in the obscurity enveloping the history of a people without letters. Nor is there anything on record respecting the origin of the Maori people themselves, beyond the general tradition of the Polynesian race, which seems to show a series of successive migrations from west to east, probably by way of Malaysia to the Pacific. Little more can now be gathered from their traditions than that they were immigrants

and that they probably found inhabitants on the east coast of the North Island belonging to the same race as themselves—the descendants of a prior migration, whose history is lost. The tradition runs that, generations ago, the Maoris dwelt in a country named Hawaiki, and that one of their chiefs, after a long voyage, reached the northern island of New Zealand. Returning to his home with a flattering description of the country he had discovered, this chief, it is said, persuaded a number of his kinsfolk and friends, who were much harassed by war, to set out with a fleet of double canoes for the new land. The names of most of the canoes are still remembered, and each tribe agrees in its account of the doings of the people of the principal canoes after their arrival in New Zealand; and from these traditional accounts the descent of the numerous tribes has been traced. Calculations, based on the genealogical staves kept by the *tohungas*, or priests, and on the well-authenticated traditions of the people, indicate that about twenty-one generations have passed since the migration, which may therefore be assumed to have taken place about five hundred and twenty-five years ago. The position of the legendary Hawaiki is unknown, but many places in the South Seas have been thus named in memory of the motherland. The Maoris speak a very pure dialect of the Polynesian language, the common tongue, with more or less variation, in all the eastern Pacific islands. When Captain Cook first visited New Zealand he availed himself of the services of a Native from Tahiti, whose speech was easily understood by the Maoris. In this way much information respecting the early history of the country and its inhabitants was obtained which could not have otherwise been had.

For results of recent researches as to probable origin of the Maoris, see Year-book for 1901.

BOUNDARIES AND AREA.

The Proclamation of Captain Hobson on the 30th January, 1840, gave as the boundaries of what was then the colony the following degrees of latitude and longitude: On the north, $34^{\circ} 30'$ S. lat.; on the south, $47^{\circ} 10'$ S. lat.; on the east, $179^{\circ} 0'$ E. long.; on the west, $166^{\circ} 5'$ E. long. These limits excluded small portions of the extreme north of the North Island and of the extreme south of Stewart Island.

In April, 1842, by Royal Letters Patent, and again by the Imperial Act 26 and 27 Vict., c. 23 (1863), the boundaries were altered so as to extend from 33° to 53° of south latitude and from 162° of east longitude to 173° of west longitude. By Proclamation bearing date the 21st July, 1887, the Kermadec Islands, lying between the 29th and 32nd degrees of south latitude and the 177th and 180th degrees of west longitude, were declared to be annexed to and to become part of the then Colony of New Zealand.

By Proclamation bearing date the 10th June, 1901, the Cook Group of islands, and all the other islands and territories situate within the boundary-lines mentioned in the following Schedule, were included :—

A line commencing at a point at the intersection of the twenty-third degree of south latitude and the one-hundred-and-fifty-sixth degree of longitude west of Greenwich, and proceeding due north to the point of intersection of the eighth degree of south latitude and the one-hundred-and-fifty-sixth degree of longitude west of Greenwich; thence due west to the point of intersection of the eighth degree of south latitude and the one-hundred-and-sixty-seventh degree of longitude west of Greenwich; thence due south to the point of intersection of the seventeenth degree of south latitude and the one-hundred-and-sixty-seventh degree of longitude west of Greenwich; thence due west to the point of intersection of the seventeenth degree of south latitude and the one-hundred-and-seventieth degree of longitude west of Greenwich; thence due south to the point of intersection of the twenty-third degree of south latitude and the one-hundred-and-seventieth degree of longitude west of Greenwich; and thence due east to the point of intersection of the twenty-third degree of south latitude and the one-hundred-and-fifty-sixth degree of longitude west of Greenwich.

The following now constitutes the Dominion of New Zealand :—

1. The island commonly known as the North Island, with its adjacent islets, having an aggregate area of 44,468 square miles, or 28,459,520 acres.

2. The island known as the South Island, with adjacent islets, having an aggregate area of 58,525 square miles, or 37,456,000 acres.

3. Stewart Island, and adjacent islets, having an area of 665 square miles, or 425,390 acres.

4. The Chatham Islands, situate 536 miles eastward of Lyttelton in the South Island, with an area of 375 square miles, or 239,920 acres.

5. The Auckland Islands, about 200 miles south of Stewart Island, extending about 30 miles from north to south, and nearly 15 from east to west, the area being 210,650 acres.

6. Campbell Island, in latitude $52^{\circ} 33' 26''$ south, and longitude $169^{\circ} 8' 41''$ west, about 30 miles in circumference, with an area of 45,440 acres.

7. The Antipodes Islands, about 458 miles in a south-easterly direction from Port Chalmers, in the South Island. These are detached rocky islands, and extend over a distance of between 4 and 5 miles from north to south. Area, 12,960 acres.

8. The Bounty Islands, a small group of islets, thirteen in number, lying north of the Antipodes Islands, and about 415 miles in an east-south-easterly direction from Port Chalmers. Area, 3,300 acres.

9. The Kermadec Islands, a group lying about 614 miles to the north-east of Russell, in the Bay of Islands. Raoul, or Sunday Island, the largest of these, is about 20 miles in circuit. The next in size is Macaulay Island, about 3 miles round. Area of the group, 8,208 acres.

10. Islands forming the Cook Group:—

Rarotonga.—Distance from Auckland, 1,638 miles; circumference, 20 miles; height, 2,920 ft.

Mangaia.—Distance from Rarotonga, 116 miles; circumference, 30 miles; height, 656 ft.

Atiu.—Distance from Rarotonga, 116 miles; circumference, 20 miles; height, 374 ft.

Aitutaki.—Distance from Rarotonga, 140 miles; circumference, 12 miles; height, 366 ft.

Mauke.—Distance from Rarotonga, 150 miles; circumference, 6 miles; height, about 60 ft.

Mitiaro.—Distance from Rarotonga, 140 miles; circumference, 5 miles; height, about 50 ft.

Takutea.—Distant from Rarotonga, 125 miles.

The Herveys (Manuae and Aoutu).—Distant from Rarotonga, 120 miles.

Total area of above Group, 150 square miles.

11. Islands outside the Cook Group:—

Savage or Niue.—Distance from Rarotonga, 580 miles; circumference, 40 miles; height, 200 ft.; area, about 100 square miles.

Palmerston.—Distance from Rarotonga, 273 miles; an atoll, 4 miles by 2 miles.

Penrhyn, or Tongareva.—Distance 735 miles from Rarotonga; an atoll, 12 miles by 7 miles.

Humphrey, or Manahiki.—Distance from Rarotonga, 650 miles; an atoll, 6 miles by 5 miles.

Rierson, or Rakaanga.—Distance from Rarotonga, 670 miles; an atoll, 3 miles by 3 miles.

Danger, or Pukapuka.—Distance from Rarotonga, 700 miles; an atoll, 3 miles by 3 miles.

Suwarrow.—Distance from Rarotonga, 530 miles; an atoll.

Total area of islands outside the Cook Group, 130 square miles.

The total area of the Dominion is thus about 104,751 square miles, of which the aggregate area of the outlying groups of islands that are practically useless for settlement amounts to about 498 square miles.

Area of the States of Australia.

The areas of the several Australian States, as stated by different authorities, vary considerably. The total area of the Australian Continent is given as 2,944,628 square miles, according to a computation made by the late Surveyor-General of Victoria, Mr. J. A. Skene, from a map of Continental Australia compiled and engraved under his direction; but the following areas are taken from latest official records:—

					Square Miles.
Queensland	..	..	..	..	670,500
New South Wales	..	..	..	..	310,372
Victoria	..	..	..	..	87,884
South Australia	..	..	..	..	903,690
Western Australia	..	..	..	..	975,920
Total, Continent of Australia					2,948,366
Tasmania	..	..	..	..	26,215
Total, Commonwealth of Australia					2,974,581

The size of these States (with New Zealand) may be better realized by comparison of their areas with those of European countries. The areas of the following countries—Austria-Hungary, Germany, France, Belgium, Holland, Denmark, Sweden and Norway, Portugal, Spain, Italy (including Sardinia and Sicily), Switzerland, Greece, Roumania, Bulgaria, Servia, Eastern Roumelia, and Turkey in Europe—containing on the whole rather less than 1,600,000 square miles, amount to little more than half the extent of the Australian Continent. If the area of Russia in Europe be added to those of the other countries the total would be about one-seventh larger than the Australian Continent, and about one-twelfth larger than the Australian States, with New Zealand.

Area of the Dominion of New Zealand.

The area of the Dominion of New Zealand is about one-seventh less than the area of Great Britain and Ireland, the South Island of New Zealand being a little larger than the combined areas of England and Wales.

United Kingdom.						Area in Square Miles.
England and Wales	..	..	..	..	..	58,311
Scotland	..	..	..	..	..	30,463
Ireland	..	..	..	..	..	32,531
Total	..	..	..	..	..	121,305
New Zealand.						Area in Square Miles.
North Island	..	..	..	..	..	44,468
South Island	..	..	..	..	..	58,525
Stewart Island	..	..	..	..	..	665
Chatham Islands	..	..	..	..	..	375
Other islands	..	..	..	..	..	718
Total	..	..	..	..	..	104,751

PHYSICAL FEATURES OF THE NORTH ISLAND.

The North Island extends over a little more than seven degrees of latitude, a distance in a direct line from north to south of 430 geographical or 498 statute miles; but, as the northern portion of the Dominion, which covers more than three degrees of latitude, trends to the westward, the distance in a straight line from the North Cape to Cape Palliser, the extreme northerly and southerly points of the island, is about 515 statute miles.

This Island is, as a whole, hilly, and in parts mountainous in character, but there are large areas of plain or comparatively level country that are, or by clearing may be made, available for agricultural purposes. Of these, the principal are the plains in Hawke's Bay on the east coast, the Wairarapa Plain in the Wellington District, and a strip of country along the west coast, about 250 miles in length, extending from a point about thirty miles from the City of Wellington to a little north of New Plymouth. The largest plain in the North Island, Kaingaroa, extends from the shore of

Lake Taupo in a north-north-easterly direction to the sea-coast in the Bay of Plenty; but a great part of it is covered with pumice-sand, and is unfit for tillage or pasture. There are several smaller plains and numerous valleys suitable for agriculture. The level or undulating country in this Island fit, or capable of being made fit, for agriculture has been roughly estimated at 13,000,000 acres. This includes lands now covered with standing forest and swamps that can be drained; also large areas of clay-marl and pumice-covered land. The clay-marl in its natural state is cold and uninviting to the farmer, but under proper drainage and cultivation it can be brought to a high state of productiveness. This kind of land is generally neglected at the present time, as settlers prefer soils more rapidly remunerative and less costly to work. The larger portion of the North Island was originally covered with forest. Although the area of bush land is still very great, yet year by year the amount is being reduced, chiefly to meet the requirements of settlement, the trees being cut down and burnt, and grass-seed sown on the ashes to create pasture. Hilly as the country is, yet from the nature of the climate it is especially suited for the growth of English grasses, which will flourish wherever there is any soil, however steep the land may be; once laid down in grass very little of the land is too poor to supply food for cattle and sheep. The area of land in the North Island deemed purely pastoral or capable of being made so, while too steep for agricultural purposes, is estimated at 14,200,000 acres. In the centre of the Island is a lake, about twenty miles across either way, called Taupo. A large area adjacent to the lake is pumice country. The Waikato River, the largest in the North Island, flows out of the north-eastern corner of this lake, and runs thence north-westward until it enters the ocean a little distance south of the Manukau Harbour. This river is navigable for small steamers for about a hundred miles from its mouth. The Maori King-country, partly occupied by Natives who for several years isolated themselves from Europeans, lies between Lake Taupo and the western coast. The River Thames, or Waihou, having its sources north of Lake Taupo, flows northward into the Firth of Thames. It is navigable for about fifty miles, but only for small steamers. The other navigable rivers in this island are the Wairoa (Kaipara), the Wanganui, and the Manawatu, the two last of which flow towards the south-west into Cook Strait.

The mountains in the North Island are estimated to occupy about one-tenth of the surface, and do not exceed 4,000 ft. in height, with the exception of a few volcanic mountains that are more lofty. Of these, the three following are the most important:—

1. The Tongariro Mountain, situated to the southward of Lake Taupo. It consists of a group of distinct volcanic cones, the lava-streams from which have so overlapped in their descent as to form one compact mountain-mass at the base. The highest of these cones is called Ngauruhoe, and attains an elevation of

7,515 ft. The craters of Ngauruhoe, the Red Crater (6,140 ft.), and Te Mari (4,990 ft.) are the three vents from which the latest discharges of lava have taken place, the most recent having occurred in 1868. These craters are still active, steam and vapour issuing from them with considerable force and noise, the vapours, charged with pungent gases and acids, making it dangerous to approach too near the crater-lips. An unusual disturbance occurred in 1909, a quantity of scoria-ash being discharged, but no lava.

2. Ruapehu. This mountain lies to the south of Ngauruhoe and Tongariro. It is a volcanic cone in the solfataras stage, and reaches the height of 9,008 ft., being in part considerably above the line of perpetual snow. The most remarkable feature of this mountain is the crater lake on its summit, which is subject to slight and intermittent eruptions, giving rise to vast quantities of steam. In March, 1895, such an eruption took place, forming a few hot springs on the margin of the lake, and increasing the heat in the lake itself. This lake lies at the bottom of a funnel-shaped crater, the steep sides of which are mantled with ice and snow. The water occupies a circular basin about 500 ft. in diameter, some 300 ft. below the enclosing peaks, and is quite inaccessible except by the use of ropes. This lake, and the three craters previously mentioned on Tongariro, are all in one straight line, which, if produced, would pass through the boiling springs at Tokaanu on the southern margin of Lake Taupo, the volcanic country north-east of that lake, and White Island, an active volcano in the Bay of Plenty, situated about twenty-seven miles from the mainland.

3. Mount Egmont. This is an extinct volcanic cone, rising to a height of 8,260 ft. The upper part is always covered with snow. This mountain is situated close to New Plymouth, and is surrounded by one of the most fertile districts in New Zealand. Rising from the plains in solitary grandeur, it is an object of extreme beauty, the cone being one of the most perfect in the world.

It is estimated that the area of mountain-tops and barren country at too high an altitude for sheep, and therefore worthless for pastoral purposes, amounts, in the North Island, to 300,000 acres.

Without a doubt the hot springs form the most remarkable feature of the North Island. They are found over a large area, extending from Tongariro, south of Lake Taupo, to Ohaeawai, in the extreme north—a distance of some 300 miles; but the principal seat of hydrothermal action appears to be in the neighbourhood of Lake Rotorua, about forty miles north-north-east from Lake Taupo. By the destruction of the famed Pink and White Terraces at Lake Rotomahana during the eruption of Mount Tarawera on the 10th June, 1886, the neighbourhood has been deprived of attractions unique in character and of unrivalled beauty; but the natural features of the country—the numerous lakes, geysers, and hot springs, some of which possess remarkable curative properties in certain complaints—are still very attractive to tourists and invalids.

The world-wide importance of conserving this region as a sanatorium for all time has been recognized by the Government, and it is dedicated by Act of Parliament to that purpose.

Notwithstanding the length of coast-line, good harbours in the North Island are not numerous. Those on the west coast north of New Plymouth are bar harbours, unsuitable for large vessels. The principal harbours are the Waitemata Harbour, on which Auckland is situated—this is rather a deep estuary than a harbour; several excellent havens in the northern peninsula; and Port Nicholson, on the borders of which Wellington is situated. This is a land-locked harbour, about six miles across, having a comparatively narrow but deep entrance from the ocean. The water is deep nearly throughout.

The Cape Colville Peninsula contains gold-bearing quartz, and at the southern end rich gold is being found in the Ohinemuri County got from the famous Waihi Mine.

COOK STRAIT.

Cook Strait separates the North and South Islands. It is some sixteen miles across at its narrowest part, but in the widest about ninety. The strait is invaluable for the purpose of traffic between different parts of the Dominion.

PHYSICAL FEATURES OF THE SOUTH ISLAND.

The extreme length of the South Island, from Jackson's Head, in Cook Strait, to Puysegur Point, at the extreme south-west, is about 525 statute miles; the greatest distance across at any point is in Otago (the southernmost) District, about 180 miles.

The South Island is intersected along almost its entire length by a range of mountains known as the Southern Alps. Some of the summits reach a height of from 10,000 ft. to 12,000 ft., Mount Cook, the highest peak, rising to 12,349 ft.

In the south, in the neighbourhood of the sounds and Lake Te Anau, there are many magnificent peaks, which, though not of great height, are, owing to their latitude, nearly all crowned with perpetual ice and snow. Further north the mountains increase in height—Mount Earnslaw, at Lake Wakatipu; and Mount Aspiring, which has been aptly termed the New Zealand Matterhorn, 9,949 ft. in height, at Lake Wanaka. Northward of this again are Mount Cook (or Aorangi), Mount Sefton, and other grand peaks.

For beauty and grandeur of scenery the Southern Alps of New Zealand may worthily compare with, while in point of variety they are said actually to surpass, the Alps of Switzerland. In New Zealand few of the mountains have been scaled; many of the peaks and most of the glaciers are as yet unnamed; and there is still, in parts of the South Island, a fine field for exploration and discovery—geographical, geological, and botanical. The wonders of the Southern Alps are only beginning to be known; but the more they are known the

more they are appreciated. The snow-line in New Zealand being so much lower than in Switzerland, the scenery, though the mountains are not quite so high, is of surpassing grandeur.

There are extensive glaciers on both sides of the range, those on the west being of exceptional beauty, as, from the greater abruptness of the mountain-slopes on that side, they descend to within about 700ft. of the sea-level, and into the midst of the evergreen forest. The largest glaciers on either side of the range are easily accessible.

The following gives the sizes of some of the glaciers on the eastern slope:—

Name.			Area of Glacier.	Length of Glacier.	Greatest Width.	Average Width.
			Acres.	Miles ch.	Miles ch.	Miles ch.
Tasman	..	..	13,664	18 0	2 14	1 15
Murchison	..	..	5,800	10 70	1 5	0 66
Godley	..	..	5,312	8 0	1 55	1 3
Mueller	..	..	3,200	8 0	0 61	0 50
Hooker	..	..	2,416	7 25	0 54	0 41

The Alletsch Glacier in Switzerland, according to Ball, in the "Alpine Guide," has an average width of one mile. It is in length and width inferior to the Tasman Glacier.

Numerous sounds or fiords penetrate the south-western coast. They are long, narrow, and deep (the depth of water at the upper part of Milford Sound is 1,270 ft., although at the entrance only 130 ft.), surrounded by giant mountains clothed with foliage to the snow-line, with waterfalls, glaciers, and snowfields at every turn. Some of the mountains rise almost precipitously from the water's edge to 5,000 ft. and 6,000 ft. above the sea. Near Milford, the finest of these sounds, is the great Sutherland Waterfall, 1,904 ft. high.

The general surface of the northern portion of the South Island, comprising the Provincial Districts of Nelson and Marlborough, is mountainous, but the greater part is suitable for grazing purposes. There are some fine valleys and small plains suitable for agriculture, of which the Wairau Valley or Plain is the largest. Deep sounds, extending for many miles, break the coast-line abutting on Cook Strait. The City of Nelson is situated at the head of Blind Bay, which has a depth inwards from Cook Strait of about forty statute miles.

The Provincial District of Canterbury lies to the south of the Marlborough District, and on the eastern side of the Island. Towards the north the land is undulating; then there is a stretch of almost perfectly level country extending towards the south-west 160 miles, after which, on the south, the country is undulating as far as the borders of the Otago District. On the east a block of hill country rises abruptly from the plain and extends for some miles

seaward. This is Banks Peninsula, containing several good harbours, the principal being Port Cooper, on the north, on which is situated Lyttelton, the chief port of the district: the harbour of Akaroa, one of the finest in the Dominion, is on the southern coast of this peninsula.

The District of Otago is, on the whole, mountainous, but has many fine plains and valleys suitable for tillage. The mountains, except towards the west coast, are generally destitute of timber, and suitable for grazing sheep. There are goldfields of considerable extent in the interior of this district. The inland lakes are also very remarkable features. Lake Wakatipu extends over fifty-four miles in length, but its greatest width is not more than four miles, and its area only 114 square miles. It is 1,070 ft. above sea-level, and has a depth varying from 1,170 ft. to 1,296 ft. Te Anau Lake is somewhat larger, having an area of 132 square miles. These lakes are bounded on the west by broken, mountainous, and wooded country, extending to the ocean.

The chief harbours in Otago are Port Chalmers, at the head of which Dunedin is situated, and the Bluff Harbour, at the extreme south.

The District of Westland, extending along the west coast of the South Island, abreast of Canterbury, is more or less auriferous throughout. The western slopes of the central range of mountains are clothed with forest trees to the snow-line; but on the eastern side timber is scarce, natural grasses covering the ground.

The rivers in the South Island are for the most part mountain-torrents, fed by glaciers in the principal mountain-ranges. When the snow melts they rise in flood, forming, where not confined by rocky walls, beds of considerable width, generally covered by enormous deposits of shingle. The largest river in the Dominion as regards volume of water is the Clutha. It is 154 miles in length, but is only navigable for boats or small river-steamers for about thirty miles. The Rivers Buller, Grey, and Hokitika, on the west coast, are navigable for a short distance from their mouths. They form the only ports in the Nelson South-west and Westland Districts. In their unimproved state they admitted, owing to the bars at their mouths, none but vessels of small draught; but, in consequence of the importance of the Grey and Buller Rivers as the sole ports available for the coal-export trade, large harbour-works have been undertaken, resulting in the deepening of the beds of these rivers, and giving a depth up to 26 ft. of water on the bars.

The area of level or undulating land in the South Island available for agriculture is estimated at about 15,000,000 acres. About 13,000,000 are suitable for pastoral purposes only, or may become so when cleared of forest and sown with grass-seed. The area of barren land and mountain-tops is estimated at about 9,000,000 acres.

STEWART ISLAND.

Foveaux Strait separates the South from Stewart Island. This last island has an area of only 425,390 acres.

Stewart Island is a great tourist resort during the summer months, and is easily reached by steamer from the Bluff, distant about 25 miles.

The principal peak is Mount Anglem, 3,200 ft. above sea-level, which has an extinct crater at its summit. Most of the island is rugged and forest-clad; the climate is mild, frost being seldom experienced; and the soil, when cleared of bush, is fertile.

The chief attractions are the numerous bays and fiords. Paterson Inlet is a magnificent sheet of water, about ten miles by four miles, situated close to Half-moon Bay, the principal port, where over two hundred people live. Horseshoe Bay and Port William are within easy reach of Half-moon Bay. Port Pegasus, a land-locked sheet of water about eight miles by a mile and a half, is a very fine harbour. At "The Neck" (Paterson Inlet) there is a Native settlement of Maoris and half-castes. The bush is generally very dense, with thick undergrowth. Rata, black-pine, white-pine, miro, and totara are the principal timber trees. Fish are to be had in great abundance and variety; oysters form an important industry. Wild pigeons, ducks, and mutton-birds are plentiful.

THE OUTLYING ISLANDS.

The outlying group of the CHATHAM ISLANDS, lying between the parallels of 43° 30' and 44° 30' south latitude, and the meridians of 175° 40' and 177° 15' west longitude, 480 statute miles east-south-east from Wellington, and 536 miles eastward of Lyttelton, consists of two principal islands and several unimportant islets. They were discovered by Lieutenant Broughton and named by him in honour of the Earl of Chatham. The largest island contains about 222,490 acres, of which an irregularly-shaped lake or lagoon absorbs 45,960 acres. About one-quarter of the surface of the land is covered with forest, the rest with fern or grass. The hills nowhere rise to a great height. Pitt Island is the next in size; the area is 15,330 acres. The greater portion of both islands is used for grazing sheep.

The KERMADEC GROUP of islands, four in number, is situated between 29° 10' and 31° 30' south latitude, and between 177° 45' and 179° west longitude. They are named Raoul or Sunday Island, Macaulay Island, Curtis Islands, and L'Espérance or French Rock. The principal island, Sunday, is 600 miles distant from Auckland, and lies a little more than half-way to Tonga, but 100 miles to the eastward of the direct steam route to that place. It is 300 miles eastward of the steam route to Fiji, and 150 miles westward of the steam route from Auckland to Rarotonga. Macaulay Island (named after the father of Lord Macaulay) and Curtis Island were discovered in May, 1788, by Lieutenant Watts, in the "Penrhyn" a transport ship. The remainder of the group was discovered in 1793, by

Admiral Bruni d'Entrecasteaux. The Admiral gave the name of "Kermadec" to the whole group of islands, after the captain of his consort ship "L'Espérance," and the name of the Admiral's ship "La Recherche" was given to the largest island. The name so given was not continued, but that of "Raoul" has taken its place, which would appear to have been given after the sailing-master of the "La Recherche," whose name was Joseph Raoul. The name of "Sunday" may also have become attached to the island from the fact that it was discovered on a Sunday. The islands are volcanic, and in two of them signs of activity are still to be seen. The rainfall is plentiful, but not excessive. The climate is mild and equable, and slightly warmer than the north of New Zealand. The following are the areas of the islands and islets of the group: Sunday Island, 7,200 acres; Herald group of islets, 85 acres; Macaulay Island, 764 acres; Curtis Islands, 128 acres and 19 acres; L'Espérance, 12 acres: total, 8,208 acres. Sunday Island is twenty miles in circumference, roughly triangular in shape, and at the highest point 1,723 ft. above the sea-level. It is rugged and broken over a very large extent of its surface, and, except in a few places, covered with forest. The soil everywhere on the island is very rich, being formed by the decomposition of a dark-coloured pumiceous tuff and a black andesitic lava, with which is closely mixed a fine vegetable mould. The great luxuriance and richness of the vegetation bear witness to the excellence of the soil, which is everywhere—except where destroyed by eruptions, and on the steep cliffs—the same rich loam. Want of water is one of the drawbacks. Three of the four lakes on the island are fresh, but so difficult of approach as to be practically useless.

The AUCKLAND ISLANDS were discovered during a whaling voyage on 18th August, 1806, by Captain Abraham Bristow, in the ship "Ocean." The discoverer named the group after Lord Auckland, again visited the islands in 1807 and then took formal possession of them. They lie about 290 miles south of Bluff Harbour, their accepted position being given as latitude $50^{\circ} 32' S.$, and longitude $166^{\circ} 13' E.$ They have several good harbours. Port Ross, at the north end of the principal island, was described by the eminent French commander D'Urville, as one of the best harbours of refuge in the known world. At the southern end of the island there is a through passage extending from the east to the west coast. It has been variously named Adams Strait and Carnley Harbour, and forms a splendid sheet of water. The largest of the islands is about 27 miles long by about 15 miles broad, and is very mountainous, the highest part being about 2,000 ft. above the sea. The west coast is bold and precipitous, but the east coast has several inlets. The wood on the island is, owing to the strong prevailing wind, scrubby in character. The New Zealand Government maintains at this island a depot of provisions and clothing for the use of shipwrecked mariners.

The **THREE KINGS**, a cluster of islands lying thirty-eight miles west-north-west of Cape Maria van Diemen. They were discovered in 1643 by Tasman, and named in honour of the day of the discovery, it being the feast of the Epiphany. Admiral Sir Richard Poore, R.N., Commander in Chief on the Australian station, reports on the 20th February, 1911, that the position as ascertained by sights of the south point of the Great Island of the Three Kings, north-west of New Zealand, is latitude $34^{\circ} 11' 48''$ south, longitude $172^{\circ} 7' 24''$ east, and the relative bearing from Cape Reinga of south point of Great Island north 60° west, true thirty-one miles.

The position at south point at present charted is latitude $34^{\circ} 9'$ south, longitude $172^{\circ} 8' 8''$ east, and the bearing from Cape Reinga $58\frac{1}{2}^{\circ}$ west, 31.8 miles.

Charts affected: Admiralty chart No. 2525; "New Zealand Pilot," eighth edition, 1908, chapter ii, page 31.

The **ANTIPODES**, an isolated group, consisting of several detached rocky islands lying nearly north and south over a space of four to five miles; accepted position, $49^{\circ} 41' 15''$ south, and longitude $178^{\circ} 43'$ east.

The **BOUNTY ISLANDS**, a little cluster of islets, thirteen in number and without verdure, discovered in 1788 by Captain Bligh, R.N., of H.M.S. "Bounty." Position verified by observation, $47^{\circ} 43'$ south, longitude $179^{\circ} 0\frac{1}{2}'$ east.

CAMPBELL ISLAND was discovered in 1810 by Frederick Hazeburgh, master of the brig "Perseverance," owned by Mr. Robert Campbell, of Sydney. It is mountainous, and of a circumference of about thirty miles. There are several good harbours.

The **COOK ISLANDS**, with others now included within the extended boundaries of the Dominion, are as under: *—

BAROTONGA (Cook Group): A magnificent island, rising to a height of 3,000 ft., clothed to the tops of the mountains with splendid vegetation. It has abundant streams, considerable tracts of sloping land, and rich alluvial valleys. The two harbours are poor.

MANGAIA, the south-easternmost of the Cook Group, is of volcanic origin, and about thirty miles in circumference. The productions, which are numerous and cheap, are obtained by assiduous labour.

ATIU (Cook Group) resembles Mangaia in appearance and extent. It is a mere bank of coral, 10 ft. or 12 ft. high, steep and rugged, except where there are small sandy beaches and some clefts, when the ascent is gradual.

AITUTAKI (Cook Group) presents a most fruitful appearance, its shores being bordered by flat land, on which are innumerable cocoanut and other trees, the higher ground being beautifully interspersed with lawns. It is eighteen miles in circuit.

* See Part IV, "Notes on Cook and other Islands" following descriptions of land districts.

MAUKE or Parry Island (Cook Group) is a low-lying island; it is about two miles in diameter, well wooded, and inhabited.

MITIARO (Cook Group) is a low-lying island, from three to four miles long and one mile wide.

HERVEY ISLANDS (Cook Group): This group consists of two islands, surrounded by a reef, which may be $10\frac{1}{2}$ miles in circumference.

NIUE, or Savage Island, lying east of the Friendly Islands, is a coral island, thirty-six miles in circumference, rising to a height of 200 ft. It has the usual tropical productions.

PALMERSTON ISLAND, lying about 500 miles east of Niue and about 220 from the nearest island of the Cook Group (Aitutaki), is remarkable as the "San Pablo" of Magellan, the first island discovered in the South Sea. It has no harbour. The soil is fairly fertile, and there is some good hardwood timber.

PENRHYN ISLAND (Tongareva) lies about 300 miles north-east of Manahiki. It is one of the most famous pearl islands in the Pacific, and there is a splendid harbour, a lagoon with two entrances, fit for ships of any size.

MANAHIKI, lying about 400 miles eastward of Danger Island, is an atoll, about thirty miles in circumference, valuable from the extent of the cocoanut groves. The interior lagoon contains a vast deposit of pearl-shell.

RAKAANGA is an atoll, three miles in length and of equal breadth.

DANGER ISLAND (Pukapuka): Next to the 10th parallel, but rather north of the latitude of the Navigators, and east of them are a number of small atolls. Of these, the nearest to the Samoan Group—about 500 miles—is Danger Island, bearing north-west of Suwarrow about 250 miles.

SUWARROW ISLAND has one of the best harbours in the Pacific. It lies about 500 miles east of Apia, the capital of the Samoan Group. It is a coral atoll, of a triangular form, fifty miles in circumference, the reef having an average width of half a mile across, enclosing a land-locked lagoon twelve miles by eight, which forms an excellent harbour. The entrance is half a mile wide, and the accommodation permits of ships riding in safety in all weathers, with depths of from three to thirty fathoms. It is out of the track of hurricanes, uninhabited, but capable by its fertility of supporting a small population. As a depot for the collection of trade from the various islands it ought to be very valuable.

THE CLIMATE OF NEW ZEALAND.

The climate of New Zealand is determined by the geographical situation of the Islands with respect to the Equator, and their isolated position in the great Pacific Ocean. Its latitude in the Southern Hemisphere corresponds very nearly with that of Italy in the Boreal—Auckland having about the same latitude as Cape Passaro, in the south of Sicily, Wellington the same as Naples.

Christchurch the same as Florence, and Dunedin the same as Venice. Although the weather is not always or everywhere comparable with the best in Italy, yet, on the whole, the climate of New Zealand is by no means inferior to the Italian. Its freedom from intense heat in summer and cold in winter are distinct advantages to animal and vegetable life, and one only needs to point out that, while continental lands are exposed by turns to winds that in summer bear radiant heat, and in winter bring piercing cold, yet, as the waters of the ocean are subject to but little change upon their surface, and tend always to modify the atmosphere in their vicinity, so warmth is preserved in winter, and the heat of summer is tempered by their influence. Thus the surrounding ocean gives to New Zealand not only the marvellous salubrity it enjoys, but insures that equability of temperature and abundant rainfall which afford it one of the best climates in the world. It must also be borne in mind that no part of New Zealand is more than seventy-five miles distant from the greatest ocean in the world. On account of its great length, however—stretching as it does from latitude 34° southwards for a thousand miles—it is exposed to different conditions of insolation, and other local variations of climate are accounted for by differences of aspect, exposure to prevailing winds, and, above all, by the influence of the lofty mountain-chains which intersect the country.

The climate of the Dominion can best be studied by reference to standards of the whole compiled from a collection of meteorological statistics of various parts. It is thus possible for any one to arrive at valuable conclusions with regard to the climatic conditions prevailing in different districts by making simple meteorological allowances for aspect, latitude, elevation, &c. For example, temperature decreases 1° Fahr. for every 300 ft. of altitude, and in this country by about the same amount for each degree of latitude southwards.

Means or averages of the various climatic elements are used for the sake of comparison between different seasons and countries, and the climatological means compiled in the Meteorological Office of New Zealand are based upon results obtained from reliable standardized instruments and a carefully selected number of representative stations. By taking a number of these results together, not only are useful monthly, seasonal, and annual means established, but errors of observation, &c., are often altogether eliminated, and the normals thus obtained are less subject to local and temporary changes than records from a single meteorological observatory. It is found convenient to treat the two main Islands of New Zealand as separate climatic regions, and, by taking the means of about ten stations in each Island, to arrive at fair averages which help to describe the climate of the country. The mean annual temperature of the North Island is thus found to be 55.4° Fahr., and that of the South Island 51.8° Fahr., while means of the absolute daily maxima and minima of temperature show a mean diurnal range of 15.9° in the North and 16.5° in the South Island. On account of atmospheric and terrestrial effects following their solar causes, the meteoro-

logical seasons are later than the solar or astronomical seasons. Thus, in the Southern Hemisphere July is usually the coldest and wettest month of the year, while January is the driest and warmest. The seasons are thus roughly divided into: Winter—June, July, August; spring—September, October, November; summer—December, January, February; autumn—March, April, May. The mean temperatures (degrees Fahrenheit) of the seasons are,—

	Winter.	Spring.	Summer.	Autumn.	Year.
North Island..	.. 49.0	54.2	61.8	56.6	55.4
South Island..	.. 44.2	51.2	59.0	52.3	51.8

Mean temperatures of particular places are usually employed in climatic comparisons, and the following annual means and monthly means of the extreme months of the summer and winter are instructive:—

NEW ZEALAND.

	Auckland.	Gisborne.	Wellington.	Christchurch.	Hokitika.
Annual ..	.. 59.0	57.2	55.25	52.8	53.25
January ..	.. 66.6	64.1	62.6	62.0	62.6
July ..	.. 51.4	51.2	47.6	42.5	47.6

AUSTRALIA.

			Brisbane.	Sydney.	Adelaide.
Annual ..	..	..	.. 67.8	62.8	63.1
January ..	..	..	.. 75.6	71.2	74.1
July ..	..	..	.. 57.7	52.2	51.3

INDIA.

			Calcutta.	Bombay.	Madras.	Colombo.
Annual ..	..	..	.. 79.5	77.7	81.9	80.1
January ..	..	..	.. 65.1	73.0	75.6	80.8
July ..	..	..	.. 81.0	82.9	85.3	77.9

EUROPE.

	London.	Edinburgh.	Paris.	Rome.	Naples.	Palermo.
Annual..	49.8	46.9	50.0	59.5	60.8	64.2
January	38.1	37.8	36.1	44.2	47.1	52.2
July ..	63.1	58.3	64.9	76.6	75.7	77.5

AMERICA.

			Montreal.	Chicago.	St. Louis.	Washington
Annual ..	..	..	.. 41.9	48.4	55.6	54.7
January ..	..	..	.. 12.4	23.4	30.6	33.3
July ..	..	..	.. 68.9	72.0	78.8	76.8

The absolutely highest and lowest temperatures recorded every day afford most valuable climatic records, and means of these extremes give the best idea of equability of the temperature.

MEANS OF THE EXTREMES AND RANGE.

North Island.

	Winter.	Spring.	Summer.	Autumn.	Annual
Mean maximum ..	56.5	62.6	71.2	63.7	63.5
" minimum ..	42.0	46.9	53.9	47.9	47.7
" diurnal range ..	14.5	15.7	17.3	15.8	15.8

South Island.

Mean maximum ..	51.8	60.1	68.7	59.4	60.0
" minimum ..	36.9	43.3	50.1	43.9	43.5
" diurnal range ..	14.9	16.8	18.6	15.5	16.5

The mean maximum of the warmest month of the year and the mean minimum of the coldest show the mean absolute range of temperature during the year. Thus, we obtain—

Mean.				North Island.	South Island.
January, maximum	..	..	..	72.2	69.9
July, minimum	..	..	..	42.6	36.3
				29.6	33.6

Mean.	Wellington. Lat 41° 16' S.	Mean.	Vienna. Lat. 48° 12' N
January, maximum	.. 69.5	July, maximum	.. 90.7
July, minimum	.. 42.1	January, minimum	.. 10.2
Mean annual range	.. 27.4	Mean annual range	.. 80.5

Rainfall.

New Zealand has an abundant rainfall, which, though well distributed throughout the months of the year, especially in the South Island, is heaviest and most prevalent in the months of winter and spring. The averages from the climatological tables are—

	Winter.	Spring.	Summer.	Autumn	Annual.
North Island	.. 13.86	14.07	12.08	11.34	51.35 in.
South Island	... 11.97	13.31	10.96	10.39	46.63 in.
	Rainy Days (0.005 in. or more).				
North Island	.. 47	49	34	21	151 days
South Island	.. 40	38	35	38	151 days

ANNUAL RAINFALLS (INCHES).

	Auckland, 43 years.	Wellington, 43 years.	Wanganui, 42 years.	Gisborne, 29 years.	Christchurch, 43 years.	Hokitika, 26 years.	Dunedin, 43 years.	Invercargill, 30 years.
Average	.. 41.68	50.62	37.70	46.98	25.16	115.59	38.40	45.38
Maximum	.. 53.81	67.36	51.09	64.33	35.29	154.45	54.50	63.60
Minimum	.. 28.14	31.36	23.58	26.09	13.54	88.21	22.15	33.26

MEAN NUMBER OF DAYS WITH RAIN (0.01 IN. OR MORE).

Gisborne (29 years), Wellington (41 years), Canterbury (39 years), and Hokitika (26 years).

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual Mean Total.
Gisborne	.. 9	10	12	13	16	17	17	16	14	12	12	9	157
Wellington	.. 10	9	11	13	16	17	18	17	16	14	13	12	166
Canterbury	.. 9	8	10	9	11	12	13	12	10	10	9	9	122
Hokitika	.. 15	11	14	14	16	15	16	12	12	18	17	17	177

Winds.

The climate of New Zealand, like that of all other countries in the Temperate Zones of the earth is a variable one, and all its atmospheric phenomena are subject to the control of passing disturbances, which in these latitudes come from the west and move eastward, seldom lasting more than three days. High pressure of the barometer—*i.e.*, above 30 in.—is usually associated with bright and warm days, but cold and clear nights, with dew in summer and frost in winter. Low pressure with the barometer, below 30 in., usually brings more humid conditions; and while the barometer falls the wind is in the north and the weather is warm and wet. When the wind turns by the west to the south for the rise of the barometer, the weather is colder, and sometimes very wet and snowy on the ranges. The changes, though frequent, are never really sudden, and the storms have not the intensity of those of higher and lower latitudes.

Having a marine climate, the winds are stronger than in continental countries; but many parts of New Zealand are so sheltered by mountain-ranges that their records are very small indeed. Another surprising feature is that as shown by means of the various months, the winds of summer are higher than those of winter. The prevailing winds throughout the year are planetary anti-trade-winds—westerlies—which go round the world, and are used by mariners to take them eastward by Cape Horn, home (to England), and on their return they pick them up off the Cape of Good Hope. In summer, however, to the north of Auckland, the easterly trade-winds often blow with much regularity for weeks together.

Sunshine.

Bright sunshine is abundant not only in summer in New Zealand, but a very large percentage is maintained even in winter. This is surprising to those who have taken consideration only of the rainfall, but it is accounted for by the fact that the rain and clouds are usually associated with the fall of night and early morning. Self-registering rain-gauges show comparative few hours with rain, and these mostly at night. Records of sunshine at Nelson, Christchurch, &c., rival those of the finest climates in the world, At Gisborne, in 1906, the Rev. H. Williams, M.A., F.R.Met.Soc., recorded 2,202 hours or 52 per cent. of the possible. At Napier the Very Rev. D. Kennedy, D.D., F.R.Met.Soc., recorded 2,692 hours 29 minutes, being 62 per cent. of the possible, or an average of 7 hours 23 minutes per day throughout the year.

Over the northern part of the British Isles the average is 1,200 hours, or 27 per cent., and in the south it is 1,600 hours, or 36 per cent.; and Italy has averages from 2,000 to 2,400 hours, or from 45 to 54 per cent. of the possible.

In few parts of the world are climatic conditions so favourable to human life and its industries as in New Zealand. The native Maori

is one of the finest races in the world, and European families under these skies have generally developed into finer and stronger men and women than their parents. Imported seed and stock have in most cases thriven marvellously in the fields, where throughout winter and summer they usually find all the nourishment they need, and require no other protection than the bush, which, wherever allowed, grows most luxuriantly. From youth to age men can in such a climate keep in vigorous health, and enjoy life to the fullest extent.

CONSTITUTION.

British sovereignty was proclaimed over New Zealand in January, 1840, and the country became a dependency of New South Wales until the 3rd May, 1841, when it was made a separate colony. The seat of Government was at Auckland, and the Executive included the Governor, and three gentlemen holding office as Colonial Secretary, Attorney-General, and Colonial Treasurer.

The successors of these gentlemen, appointed in August, 1841, May, 1842, and January, 1844, respectively, continued in office until the establishment of Responsible Government on the 7th May, 1856. Only one of them—Mr. Swainson, the Attorney-General—sat as a member of the first General Assembly, opened on the 27th May, 1854. During the session of that year there were associated with the permanent members of the Executive Council certain members of the General Assembly. These latter held no portfolios.

The Government of the colony was at first vested in the Governor, who was responsible only to the Crown; but in 1852 an Act granting representative institutions to the colony was passed by the Imperial Legislature. Under it the constitution of a General Assembly for the whole colony was provided for, to consist of a Legislative Council, the members of which were to be nominated by the Governor, and of an elective House of Representatives. The first session of the General Assembly was opened on the 27th May, 1854, but the members of the Executive were not responsible to Parliament. The first Ministers under a system of Responsible Government were appointed in the year 1856. By the Act of 1852 the colony was divided into six provinces, each to be presided over by an elective Superintendent, and to have an elective Provincial Council, empowered to legislate, except on certain specified subjects. The franchise amounted practically to household suffrage. In each case the election was for four years, but a dissolution of the Provincial Council by the Governor could take place at any time, necessitating a fresh election both of the Council and of the Superintendent. The Superintendent was chosen by the whole body of electors of the province; each member of the Provincial Council by the electors of a district. The Provincial Governments, afterwards increased to nine, remained as integral parts of the Constitution of the colony until the 1st November, 1876, when they were abolished by an Act of the General Assembly, that body having

been vested with the power of altering the Constitution Act. On the same day an Act of the General Assembly which subdivided the colony (exclusive of the areas included within municipalities) into counties, and established a system of local county government, came into force.

By resolutions passed by the House of Representatives on the 12th July, 1907, and by the Legislative Council on the 16th July, 1907, addresses were forwarded to His Majesty the King respectfully requesting that the necessary steps might be taken to change the designation of New Zealand from the Colony of New Zealand to the Dominion of New Zealand; and His Majesty the King, by Order in Council dated 9th September, 1907, and by Proclamation issued 10th September, 1907, was graciously pleased to change the style and designation of the Colony of New Zealand to "The Dominion of New Zealand"; such change taking effect from Thursday, the 26th day of September, 1907.

GOVERNMENT.

The Governor is appointed by the King. His salary is £5,000 a year, with an annual allowance of £1,500 on account of his establishment, and of £500 for travelling-expenses, provided by the Dominion.

Members of the Legislative Council hold their seats under writs of summons from the Governor. Till the year 1891 the appointments were for life; but in September of that year an Act was passed making appointments after that time tenable for seven years only, though Councillors may be reappointed. In either case seats may be vacated by resignation or extended absence. Two members of the Council are aboriginal Native chiefs.

The members of the House of Representatives (now designated M.P.) are elected for three years from the time of each general election; but at any time a dissolution of Parliament by the Governor may render a general election necessary. Four of the members are representatives of Native constituencies. For the purposes of European representation the Dominion is divided into seventy-six electoral districts, each returning one member. The full number of members composing the House of Representatives is thus eighty. Members of the House of Representatives are chosen by the votes of the electors in every electoral district appointed for that purpose.

In 1889 an amendment of the Representation Act was passed, which contained a provision prohibiting any elector from giving his vote in respect of more than one electorate at any election. In 1893 women of both races were granted by law the right to vote at the elections for members of the House of Representatives. The qualification for registration is the same for both sexes. No person is entitled to be registered on more than one electoral roll within the Dominion. Women are not

qualified to be elected as members of the House of Representatives. Every man registered as an elector, and not specially excepted by the Legislature Act now in force, is qualified to be elected a member of the House of Representatives for any electoral district. For European representation every adult person, if resident one year in the Dominion and three months in one electoral district, can be registered as an elector. Freehold property of the value of £25 held for six months preceding the day of registration until 1896 entitled a man or woman to register, if not previously registered under the residential qualification; but in 1896 the property qualification was abolished (except in case of existing registrations), and residence alone now entitles a man or woman to have his or her name placed upon an electoral roll. For Maori representation every adult Maori resident in any Maori electoral district (of which there are four only in the Dominion) can vote. Registration is not required in Native districts. [The above provisions are now incorporated in the Legislature Act, 1908, which consolidates the electoral laws.] The electoral laws are the subject of special comment further on in this work.

THE SEAT OF GOVERNMENT.

Up to the year 1865 the seat of Government of New Zealand was at Auckland. Several attempts were made by members of Parliament, by motions in the Legislative Council and House of Representatives, to have it removed to some more central place; but it was not until November, 1863, that Mr. Domett (the then ex-Premier) was successful in carrying resolutions in the House of Representatives that steps should be taken for appointing some place in Cook Strait as the permanent seat of Government. The resolutions adopted were: "(1.) That it has become necessary that the seat of Government in the colony should be transferred to some suitable locality in Cook Strait. (2.) That, in order to promote the accomplishment of this object, it is desirable that the selection of the particular site in Cook Strait should be left to the arbitrament of an impartial tribunal. (3.) That, with this view, a Bill should be introduced to give effect to the above resolutions." On the 25th November an address was presented to the Governor, Sir George Grey, K.C.B., by the Commons of New Zealand, requesting that the Governors of the Colonies of New South Wales, Victoria, and Tasmania, might each be asked to appoint one Commissioner for the purpose of determining the best site in Cook Strait. Accordingly, the Hon. Joseph Docker, M.L.C., New South Wales; the Hon. Sir Francis Murphy, Speaker of the Legislative Council, Victoria; and R. C. Gunn, Esq., Tasmania, were appointed Commissioners.

These gentlemen, having made a personal inspection of all suitable places, arrived at the unanimous decision "that Wellington, in Port Nicholson, was the site upon the shores of Cook Strait which

presented the greatest advantages for the administration of the government of the colony."

The seat of Government was, therefore, in accordance with the recommendation of the Commissioners, removed to Wellington in February, 1865.

PUBLIC WORKS.

Nearly all the public works of New Zealand are in the hands of the Government of the Dominion, and in the early days they simply kept pace with the spread of settlement. In 1870, however, a great impetus was given to the progress of the whole country by the inauguration of the "Public Works and Immigration Policy," which provided for carrying out works in advance of settlement. Railways, roads, and water-races were constructed, and immigration was conducted on a large scale. As a consequence, the population increased from 267,000 in 1871 to 501,000 in 1881, and to 1,002,679 in December, 1910: besides whom there were 47,731 Maoris, and also 12,340 persons residing in the Cook and other Pacific Islands within the extended boundaries of the Dominion.

SUCCESSIVE GOVERNORS.

SUCCESSION OF GOVERNORS OF NEW ZEALAND, AND THE DATES ON WHICH THEY ASSUMED AND RETIRED FROM THE GOVERNMENT.

Captain William Hobson, R.N., from Jan., 1840, to 10 Sept., 1842.

[British sovereignty was proclaimed by Captain Hobson in January, 1840, and New Zealand became a dependency of the Colony of New South Wales until 3rd May, 1841, at which date it was proclaimed a separate colony. From January, 1840, to May, 1841, Captain Hobson was Lieutenant-Governor of New Zealand under Sir George Gipps, Governor of New South Wales, and from May, 1841, Governor of New Zealand; the seat of Government being at Auckland, where he died in September, 1842. From the time of Governor Hobson's death, in September, 1842, until the arrival of Governor Fitzroy, in December, 1843, the Government was carried on by the Colonial Secretary, Lieutenant Shortland.]

Lieutenant Shortland, Administrator, from 10 Sept., 1842, to 26 Dec., 1843.

Captain Robert Fitzroy, R.N., from 26 Dec., 1843, to 17 Nov., 1845.

Captain Grey (became Sir George Grey, K.C.B., in 1848), from 18 Nov., 1845, to 31 Dec., 1853.

[Captain Grey held the commission as Lieutenant-Governor of the colony until the 1st January, 1848, when he was sworn in as Governor-in-Chief over the Islands of New Zealand, and as Governor of the Province of New Ulster and Governor of the Province of New Munster. After the passing of the New Zealand Constitution Act, Sir George Grey was, on the 13th September, 1852, appointed Governor of the

colony, the duties of which office he assumed on the 7th March, 1853. In August, 1847, Mr. E. J. Eyre was appointed Lieutenant-Governor of New Munster: he was sworn in, 28th January, 1848. On 3rd January, 1848, Major-General George Dean Pitt was appointed Lieutenant-Governor of New Ulster: he was sworn in, 14th February, 1848; died, 8th January, 1851; and was succeeded as Lieutenant-Governor by Lieutenant-Colonel Wynyard, appointed 14th April, 1851; sworn in, 26th April, 1851. The duties of the Lieutenant-Governor ceased on the assumption by Sir George Grey of the office of Governor, on the 7th March, 1853.]

Lieutenant-Colonel Robert Henry Wynyard, C.B., Administrator, from 3 Jan., 1854, to 6 Sept., 1855.

Colonel Thomas Gore Browne, C.B., from 6 Sept., 1855, to 2 Oct., 1861.

Sir George Grey, K.C.B., Administrator, from 3 Oct., 1861; Governor, from 4 Dec., 1861, to 5 Feb., 1868.

Sir George Fergusson Bowen, G.C.M.G., from 5 Feb., 1868, to 19 Mar., 1873.

Sir George Alfred Arney, Chief Justice, Administrator, from 21 Mar. to 14 June, 1873.

Sir James Fergusson, Baronet, P.C., from 14 June, 1873, to 3 Dec., 1874.

The Marquis of Normanby, P.C., G.C.M.G., Administrator, from 3 Dec., 1874; Governor, from 9 Jan., 1875, to 21 Feb., 1879.

James Prendergast, Esquire, Chief Justice, Administrator, from 21 Feb. to 27 Mar., 1879.

Sir Hercules George Robert Robinson, G.C.M.G., Administrator, from 27 Mar., 1879; Governor, from 17 April, 1879, to 8 Sept., 1880.

James Prendergast, Esquire, Chief Justice, Administrator, from 9 Sept. to 29 Nov., 1880.

The Honourable Sir Arthur Hamilton Gordon, G.C.M.G., from 29 Nov., 1880, to 23 June, 1882.

Sir James Prendergast, Chief Justice, Administrator, from 24 June, 1882, to 20 Jan., 1883.

Lieutenant-General Sir William Francis Drummond Jervois, G.C.M.G., C.B., from 20 Jan., 1883, to 22 Mar., 1889.

Sir James Prendergast, Chief Justice, Administrator, from 23 Mar. to 2 May, 1889.

The Earl of Onslow, G.C.M.G., from 2 May, 1889, to 24 Feb., 1892.

Sir James Prendergast, Chief Justice, Administrator, from 25 Feb., to 6 June, 1892.

The Earl of Glasgow, G.C.M.G., from 7 June, 1892, to 6 Feb., 1897.

Sir James Prendergast, Chief Justice, Administrator, from 8 Feb., 1897, to 9 Aug., 1897.

The Earl of Ranfurly, G.C.M.G., from 10 Aug., 1897, to 19 June, 1904.

The Right Honourable William Læe, Baron Plunket, K.C.M.G., K.C.V.O., from 20 June, 1904, to 8 June, 1910.

Sir Robert Stout, K.C.M.G., Chief Justice, Administrator, from 8 June, 1910, to 22 June, 1910.

The Right Honourable John Poynder Dickson-Poynder, Baron Islington, D.S.O., from 22 June, 1910.

SUPREME COURT JUDGES.

SUPREME COURT JUDGES, PAST AND PRESENT, WITH DATES OF APPOINTMENT, AND OF RESIGNATION OR DEATH.

Sir W. Martin, appointed Chief Justice, 10 Jan., 1842. Resigned, 12 June, 1857.

H. S. Chapman, appointed, 26 Dec., 1843. Held office until March, 1852. Reappointed, 23 Mar., 1864. Resigned, 31 Mar., 1875.

S. Stephen, appointed, 30 July, 1850. Appointed Acting Chief Justice, 20 Oct., 1855. Died, 13 Jan., 1858.

Daniel Wakefield, appointed, Oct., 1855. Died, Oct., 1857.

Hon. H. B. Gresson, appointed temporarily, 8 Dec., 1857. Permanently, 1 July, 1862. Resigned, 31 Mar., 1875.

Sir G. A. Arney, appointed Chief Justice, 1 Mar., 1858. Resigned, 31 Mar., 1875.

A. J. Johnston, appointed, 2 Nov., 1858. Died, 1 June, 1888.

C. W. Richmond, appointed, 20 Oct., 1862. Died, 3 Aug., 1895.

J. S. Moore, appointed temporarily, 15 May, 1866. Relieved, 30 June, 1868.

C. D. R. Ward, appointed temporarily, 1 Oct., 1868. Relieved, May, 1870. Appointed temporarily, 21 Sept., 1886. Relieved, 12 Feb., 1889.

Sir J. Prendergast, appointed Chief Justice, 1 April, 1875. Resigned, 25 May, 1899.

T. B. Gillies, appointed, 3 Mar., 1875. Died, 26 July, 1889.

J. S. Williams, appointed, 3 Mar., 1875.

J. E. Denniston, appointed, 11 Feb., 1889.

E. T. Conolly, appointed, 19 Aug., 1889. Resigned, 9 Sept., 1903.

Hon. Sir P. A. Buckley, K.C.M.G., appointed, 20 Dec., 1895. Died, 18 May, 1896.

W. B. Edwards, appointed, 11 July, 1896.

F. W. Pennefather, appointed temporarily, 25 April, 1898. Resigned, 24 April, 1899.

Hon. Sir Robert Stout, K.C.M.G., appointed Chief Justice, 22 June, 1899.

J. C. Martin, Acting Judge, appointed, 12 April, 1900. Resigned, 4 Dec., 1900.

Theophilus Cooper, appointed, 21 Feb., 1901.

F. R. Chapman, appointed, 11 Sept., 1903.

C. E. Button, appointed temporarily, 12 March, 1907. Resigned, 29th Feb., 1908.

William Alexander Sim, appointed, 16 January, 1911.

EXECUTIVE COUNCIL, 1843-56.

MEMBERS OF THE EXECUTIVE COUNCIL OF THE DOMINION OF NEW ZEALAND PREVIOUS TO THE ESTABLISHMENT OF RESPONSIBLE GOVERNMENT (NOT INCLUDING THE OFFICERS COMMANDING THE FORCES).

Willoughby Shortland, Colonial Secretary, from 3 May, 1841, to 31 Dec., 1843; succeeded by Mr. Sinclair.

Francis Fisher, Attorney-General, from 3 May to 10 Aug., 1841; succeeded by Mr. Swainson.

George Cooper, Colonial Treasurer, from 3 May, 1841, to 9 May, 1842; succeeded by Mr. Shepherd.

William Swainson, Attorney-General, from 10 Aug., 1841, to 7 May, 1856.

Alexander Shepherd, Colonial Treasurer, from 9 May, 1842, to 7 May, 1856.

Andrew Sinclair, Colonial Secretary, from 6 Jan., 1844, to 7 May, 1856.

[The three gentlemen last mentioned were nominated by Her late Majesty as *ex officio* members of the Executive Council. Two of them, the Colonial Secretary and the Colonial Treasurer, were not members of the General Assembly, opened for the first time 27th May, 1854, but all three remained in office until the establishment of Responsible Government.]

James Edward FitzGerald, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.

Henry Sewell, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.

Frederick Aloysius Weld, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.

Francis Dillon Bell, M.L.C., without portfolio, from 30 June to 11 July, 1854.

Thomas Houghton Bartley, M.L.C., without portfolio, from 14 July to 2 Aug., 1854.

Thomas Spencer Forsaith, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.

Edward Jerningham Wakefield, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.

William Thomas Locke Travers, M.H.R., without portfolio, 31 Aug. to 2 Sept., 1854.

James Macandrew, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.

PARLIAMENTS.

NUMBER OF PARLIAMENTS SINCE THE CONSTITUTION ACT PASSED FOR CONFERRING REPRESENTATIVE INSTITUTIONS UPON THE DOMINION OF NEW ZEALAND, WITH THE DATES OF OPENING AND CLOSING OF SESSIONS AND DATES OF DISSOLUTION.

Parliament.	Date of Opening of Sessions.	Date of Prorogation.
First (dissolved 15th September, 1855)	27 May, 1854 ..	9 August, 1854.
	31 August, 1854 ..	16 September, 1854.
	8 August, 1855 ..	15 September, 1855.
Second (dissolved 5th November, 1860)	15 April, 1856 ..	16 August, 1856.
	(No session in 1857)	
	10 April, 1858 ..	21 August, 1858.
	(No session in 1859)	
	30 July, 1860 ..	5 November, 1860.
Third (dissolved 27th January, 1866)	3 June, 1861 ..	7 September, 1861.
	7 July, 1862 ..	15 September, 1862.
	19 October, 1863 ..	14 December, 1863.
	24 November 1864 ..	13 December, 1864.
	26 July, 1865 ..	30 October, 1865.
Fourth (dissolved 30th December, 1870)	30 June, 1866 ..	8 October, 1866.
	9 July, 1867 ..	10 October, 1867.
	9 July, 1868 ..	20 October, 1868.
	1 June, 1869 ..	3 September, 1869.
	14 June, 1870 ..	13 September, 1870.
Fifth (dissolved 6th December, 1875)	14 August, 1871 ..	16 November, 1871.
	16 July, 1872 ..	25 October, 1872.
	15 July, 1873 ..	3 October, 1873.
	3 July, 1874 ..	31 August, 1874.
	20 July, 1875 ..	21 October, 1875.
Sixth (dissolved 15th August, 1879)	15 June, 1876 ..	31 October, 1876.
	19 July, 1877 ..	10 December, 1877.
	26 July, 1878 ..	2 November, 1878.
	11 July, 1879 ..	11 August, 1879.
Seventh (dissolved 8th November, 1881)	24 September, 1879 ..	19 December, 1879.
	28 May, 1880 ..	1 September, 1880.
	9 June, 1881 ..	24 September, 1881.
Eighth (dissolved 27th June, 1884)	18 May, 1882 ..	15 September, 1882.
	14 June, 1883 ..	8 September, 1883.
	5 June, 1884 ..	24 June, 1884.
Ninth (dissolved 15th July, 1887) ..	7 August, 1884 ..	10 November, 1884.
	11 June, 1885 ..	22 September, 1885.
	13 May, 1886 ..	18 August, 1886.
	26 April, 1887 ..	10 July, 1887.
Tenth (dissolved 3rd October, 1890)	6 October, 1887 ..	23 December, 1887.
	10 May, 1888 ..	31 August, 1888.
	20 June, 1889 ..	19 September, 1889.
	19 June, 1890 ..	18 September, 1890.

PARLIAMENTS—*continued.*

Parliament.	Date of Opening of Sessions.	Date of Prorogation.
Eleventh (dissolved 8th November, 1893)	23 January, 1891 ..	31 January, 1891.
	11 June, 1891 ..	25 September, 1891.
	23 June, 1892 ..	12 October, 1892.
	22 June, 1893 ..	7 October, 1893.
Twelfth (dissolved 14th November, 1896)	21 June, 1894 ..	24 October, 1894.
	20 June, 1895 ..	2 November, 1895.
	11 June, 1896 ..	19 October, 1896.
Thirteenth (dissolved 15th November, 1899)	7 April, 1897 ..	12 April, 1897.
	23 September, 1897 ..	22 December, 1897.
	24 June, 1898 ..	5 November, 1898.
	23 June, 1899 ..	24 October, 1899.
Fourteenth (dissolved 5th November, 1902)	22 June, 1900 ..	22 October, 1900.
	1 July, 1901 ..	8 November, 1901.
	1 July, 1902 ..	4 October, 1902.
Fifteenth (dissolved 29th November, 1905)	29 June, 1903 ..	25 November, 1903.
	28 June, 1904 ..	8 November, 1904.
	27 June, 1905 ..	31 October, 1905.
Sixteenth (dissolved 29th October, 1908)	27 June, 1906 ..	3 July, 1906.
	21 August, 1906 ..	29 October, 1906.
	27 June, 1907 ..	25 November, 1907.
	29 June, 1908 ..	12 October, 1908.
Seventeenth	10 June, 1909 ..	17 June, 1909.
	7 October, 1909 ..	29 December, 1909.
	28 June, 1910 ..	5 December, 1910.

SUCCESSIVE MINISTRIES

SINCE THE ESTABLISHMENT OF RESPONSIBLE GOVERNMENT IN NEW ZEALAND IN 1856.

Name of Ministry.	Assumed Office.	Retired.
1. Bell-Sewell	7 May, 1856 ..	20 May, 1856.
2. Fox	20 May, 1856 ..	2 June, 1856.
3. Stafford	2 June, 1856 ..	12 July, 1861.
4. Fox	12 July, 1861 ..	6 August, 1862.
5. Domett	6 August, 1862 ..	30 October, 1863.
6. Whitaker-Fox	30 October, 1863 ..	24 November, 1864.
7. Weld	24 November, 1864 ..	16 October, 1865.
8. Stafford	16 October, 1865 ..	28 June, 1869.
9. Fox	28 June, 1869 ..	10 September, 1872.
10. Stafford	10 September, 1872 ..	11 October, 1872.

SUCCESSIVE MINISTRIES—*continued*.

Name of Ministry.	Assumed Office.	Retired.
11. Waterhouse	11 October, 1872 ..	3 March, 1873.
12. Fox	3 March, 1873 ..	8 April, 1873.
13. Vogel	8 April, 1873 ..	6 July, 1875.
14. Paller	6 July, 1875 ..	15 February, 1876.
15. Vogel	15 February, 1876	1 September, 1876.
16. Atkinson	1 September, 1876	13 September, 1876.
17. Atkinson (reconstituted)	13 September, 1876	13 October, 1877.
18. Grey	15 October, 1877 ..	8 October, 1879.
19. Hall	8 October, 1879 ..	21 April, 1882.
20. Whitaker	21 April, 1882 ..	25 September, 1883.
21. Atkinson	25 September, 1883	16 August, 1884.
22. Stout-Vogel	16 August, 1884 ..	28 August, 1884.
23. Atkinson	28 August, 1884 ..	3 September, 1884.
24. Stout-Vogel	3 September, 1884	8 October, 1887.
25. Atkinson	8 October, 1887 ..	24 January, 1891.
26. Ballance	24 January, 1891 ..	1 May, 1893.*
27. Seddon	1 May, 1893.	21 June, 1906.†
28. Hall-Jones	21 June, 1906 ..	6 August, 1906.
29. Ward.. ..	6 August, 1906.	

* Owing to the death of the Premier, the Hon. J. Ballance, on 27th April, 1893.

† Owing to the death of the Premier, Right Hon. R. J. Seddon, P.C., on 10th June, 1906.

PREMIERS OF SUCCESSIVE MINISTRIES.

Name of Premier.	Name of Premier.
Henry Sewell.	Harry Albert Atkinson (Ministry reconstituted).
William Fox.	Sir George Grey, K.C.B.
Edward William Stafford.	Hon. John Hall.
William Fox.	Frederick Whitaker, M.L.C.
Alfred Domett.	Harry Albert Atkinson.
Frederick Whitaker.	Robert Stout.
Frederick Aloysius Weld.	Harry Albert Atkinson.
Edward William Stafford.	Sir Robert Stout, K.C.M.G.
William Fox.	Sir Harry Albert Atkinson, K.C.M.G.
Hon. Edward William Stafford.	John Ballance.
George Marsden Waterhouse.	Rt. Hon. Richard John Seddon, P.C.
Hon. William Fox.	William Hall-Jones.
Hon. Julius Vogel, C.M.G.	Right Hon. Sir Joseph George Ward,
Hon. Daniel Pollen, M.L.C.	P.C., K.C.M.G.,
Sir Julius Vogel, K.C.M.G.	
Harry Albert Atkinson.	

SPEAKERS OF THE LEGISLATIVE COUNCIL.

WITH DATES OF THEIR APPOINTMENT AND DATES OF RETIREMENT
OR DEATH.

Name of Speaker.	Date of Appointment.	Date of Retirement or Death.
Hon. William Swainson	16 May, 1854 ..	8 August, 1855.
Hon. Frederick Whitaker	8 August, 1855 ..	12 May, 1856.
Hon. Thomas Houghton Bartley ..	12 May, 1856 ..	1 July, 1868.
Hon. Sir John Larkins Cheese Richardson, Kt.	1 July, 1868 ..	14 June, 1879.
Hon. Sir William Fitzherbert, K.C.M.G.	14 June, 1879 ..	22 April, 1887
Hon. George Marsden Waternhouse ..	22 April, 1887 ..	21 September, 1887.
Hon. Sir William Fitzherbert, K.C.M.G.	21 September, 1887	23 January, 1891.
Hon. Sir Harry Albert Atkinson, K.C.M.G.	23 January, 1891	28 June, 1892.
Hon. Sir Henry John Miller	8 July, 1892.	
	6 October, 1897	9 July 1903.
Hon. W. G. Walker, C.M.G.	9 July, 1903 ..	5 January, 1904.
Hon. John Rigg (Acting)	5 January, 1904	7 July, 1904.
Hon. Sir A. J. Cadman, K.C.M.G. ..	7 July, 1904 ..	23 March, 1905.
Hon. R. H. J. Reeves (Acting) ..	23 March, 1905 ..	4 July, 1905.
Hon. C. C. Bowen	4 July, 1905.	

SPEAKERS OF THE HOUSE OF REPRESENTATIVES,

WITH DATES OF THEIR ELECTION AND DATES OF RETIREMENT.

Name of Speaker.	Date of Election.	Date of Retirement.
Sir Charles Clifford, Bart.	26 May, 1854	
	15 April, 1856 ..	3 June, 1861.
Sir David Monro, Kt. Bach.	3 June, 1861	
	30 June, 1866 ..	13 Sept., 1870.
Sir Francis Dillon Bell, K.C.M.G., C.B.	14 August, 1871 ..	21 October, 1875.
Sir William Fitzherbert, K.C.M.G. ..	15 June, 1876 ..	13 June 1879.
Sir George Maurice O'Rorke, Kt. Bach.	11 July, 1879	
	24 September, 1879	
	18 May, 1882	
	7 August, 1884	
	6 October, 1887	3 October, 1890.
Hon. Major William Jukes Steward ..	23 January, 1891	8 November, 1893.
Hon. Sir George Maurice O'Rorke, Kt. Bach.	21 June, 1894	
	6 April, 1897	
	22 June, 1900 ..	5 November, 1902.
Hon. Arthur Robert Guinness	29 June, 1903.	
	27 June, 1906.	
	10 June, 1909.	

FOREIGN CONSULS.

CONSULS OF FOREIGN COUNTRIES RESIDING IN, OR WITH JURISDICTION OVER, NEW ZEALAND, 31st MAY, 1911.

Country represented.	Office held.	Name.	Place of Residence.
Argentine Republic	Vice-Consul (with jurisdiction over New Zealand)	Hon. T. Fergus	Dunedin.
Austria-Hungary	Consul-General for the Commonwealth of Australia, New Zealand, and the South Sea Islands	Heinrich Jehlitschka ..	Sydney.
Belgium ..	Consul ..	E. Langguth	Auckland.
Belgium ..	Consul-General for Australasia and Fiji	F. Huylebroeck	Melbourne.
" ..	Consul (with jurisdiction over New Zealand)	A. Dauge	Sydney.
" ..	Consul-General (with jurisdiction over the Provincial Districts of Hawke's Bay, Taranaki, and Wellington)	Hon. Charles John Johnston	Wellington.
" ..	Vice-Consul ..	G. F. Johnston	Christchurch.
" ..	Consul (with jurisdiction over the Districts of Canterbury, Marlborough, Nelson, and Westland)	Joseph James Kinsey ..	
" ..	Consul ..	Alexander Manual Ferguson	Auckland.
" ..	" ..	George Lyon Denniston ..	Dunedin.
Brazil ..	Vice-Consul ..	A. H. Miles	Wellington.
China ..	Consul ..	Hwang Yung-Liang ..	Sydney.
Chili ..	Consul-General for the Commonwealth of Australia, and New Zealand	William Brown	
" ..	Honorary Consul	George Dunnet	Auckland.
" ..	"	Albert Martin, M.D. ..	Wellington.
" ..	"	J. G. F. Palmer	Christchurch.
" ..	"	J. A. Roberts	Dunedin.
Denmark ..	Consul (for North Island)	Francis Henry Dillon Bell ..	Wellington (Principal Consulate).

FOREIGN CONSULS—*continued.*

Country represented.	Office held.	Name.	Place of Residence.
Denmark ..	Vice-Consul ..	William Henry Dillon Bell..	Wellington.
" ..	Consul (for South Island)	Henry Bylove Sorensen ..	Christchurch.
" ..	Vice-Consul ..	(Vacant) ..	Auckland.
" ..	" ..	William Edward Perry ..	Hokitika.
" ..	" ..	Odin Henry Möller ..	Dunedin.
France ..	Consul (for New Zealand)	" ..	Auckland.
" ..	Vice-Consul ..	Percival Clay Neill ..	Dunedin.
" ..	Consular Agent	George Humphreys ..	Christchurch.
" ..	" ..	James Macintosh ..	Wellington.
German Empire	Consul-General for Commonwealth of Australia, New Zealand, and Fiji	Dr. Irmer ..	Sydney.
" ..	Vice-Consul General	Count Deym Von Stritez ..	"
" ..	Consul ..	Carl Seegner ..	Auckland.
" ..	" ..	Willi Fels ..	Dunedin.
" ..	" (acting)	Karl Joosten ..	Christchurch.
" ..	" ..	Friedrich August Krull ..	Wanganui.
" ..	Vice-Consul ..	Eberhard Focke ..	Wellington.
Greece ..	Vice-Consul for the Dominion of New Zealand	Joseph Frank Dyer ..	"
Honduras ..	Consul-General for Commonwealth of Australia, and New Zealand	Frederic Walsh ..	Sydney.
Italy ..	Consul-General for Commonwealth of Australia, New Zealand, and Fiji	Commendatore Luigi Mercatelli	Melbourne.
" ..	Consular Agent	Thomas Wallace ..	Christchurch.
" ..	" ..	Roland Thomas Robertson..	Wellington.
" ..	" ..	Sir James Mills, K.C.M.G..	Dunedin.
" ..	" ..	Geraldo Giuseppe Perotti ..	Greymouth.
" ..	" ..	Charles Rhodes ..	Auckland.
Japan ..	Consul ..	Thomas Young ..	Wellington.
" ..	Consul-General	M. Saito ..	Sydney.
Liberia ..	Consul ..	Hon. Charles Louissou ..	Christchurch.
" ..	Honorary Consul	Arnold Woodford Izard ..	Wellington.
Mexico ..	Consul ..	John William Hall ..	Auckland.
Netherlands ..	Consul-General for Commonwealth of Australia, New Zealand, and Fiji	W. L. Bosschart ..	Melbourne.

FOREIGN CONSULS—*continued.*

Country represented.	Office held.	Name.	Place of Residence.
Netherlands ..	Consul, with jurisdiction over New Zealand and the Islands belonging thereto	Hon. Charles John Johnston	Wellington.
" ..	Vice-Consul ..	George Ritchie	Dunedin.
" ..	" ..	Ambrose Millar	Auckland.
" ..	" ..	Harold Featherston Johnston	Wellington.
" ..	" ..	G. de Vries	Christchurch.
Norway ..	Consul-General for Commonwealth of Australia, New Zealand, and the adjacent Islands	O. Rümcke	Melbourne.
" ..	Vice-Consul ..	Sigurd Bentzon	"
" ..	Consul ..	Alex. W. Newton	Wellington.
" ..	Vice-Consul ..	Leslie Robert Wilson ..	Dunedin.
" ..	" ..	Robert Millar	Auckland.
" ..	" ..	Albert Peter Gundersen ..	Christchurch
" ..	" ..	Mathias Ericksen Wüg ..	Invercargill.
" ..	" ..	Richard Rowland Whyte ..	Westport.
Paraguay ..	Consul ..	A. E. Kernot	Wellington.
Peru ..	Consul (with jurisdiction over the Commonwealth of Australia, and New Zealand)	J. Maitland Paxton ..	Sydney.
Portugal ..	Consul ..	John Duncan	Wellington.
" ..	Vice-Consul ..	Henry Rees George	Auckland.
" ..	" ..	Arthur Donald Stuart Duncan	Wellington.
" ..	" ..	Charles William Rattray ..	Dunedin.
Russia ..	Consul-General for the Commonwealth of Australia, and the Dominion of New Zealand	A. N. d'Abaza	Melbourne.
Spain.. ..	Consul-in-Chief (with jurisdiction over Australia and New Zealand)	Henry Cave	"
" ..	Honorary Vice-Consul	Alexander H. Turnbull ..	Wellington.
Sweden ..	Consul ..	Arthur Edward Pearce ..	"
" ..	Vice-Consul ..	Sidney Jacob Nathan	Auckland.
" ..	" ..	Albert Kaye	Christchurch.
United States of America	Consul-General (for New Zealand and its dependencies)	William A. Prickitt ..	Auckland.

FOREIGN CONSULS—*continued.*

Country represented.	Office held.	Name.	Place of Residence.
United States of America	Vice-Consul-General	Leonard A. Bachelder ..	Auckland.
"	Consular Agent	Frank Graham ..	Christchurch.
"	"	Charles Harcourt Turner ..	Wellington.
"	"	Frederick Orlando Bridgeman	Dunedin.
Uruguay ..	Consul ..	Don Cesar Montero Bustamente	Wellington.

TRADE COMMISSIONER OF THE DOMINION OF CANADA, IN NEW ZEALAND.

W. A. Beddoe, Auckland.

BRITISH TRADE COMMISSIONERS.

Australia—C. Hamilton Wicks, Melbourne. (Telegraphic address: "Combrit.")

Canada—Richard Grigg, Montreal. (Telegraphic address: "Britcoin.")

South Africa—R. Sothorn Holland, Cape Town. (Telegraphic address: "Austere.")

New Zealand—(Vacant at present), Wellington; A. J. Denniston, Auckland; W. T. Monkman, Dunedin.

HIGH COMMISSIONER FOR NEW ZEALAND, IN LONDON.

The Hon. Sir W. Hall-Jones, K.C.M.G., Westminster Chambers, 13 Victoria Street, S.W. (Appointed as from 1st December, 1908.)

Secretary—C. F. W. Palliser.

THE COLONIAL OFFICE.

(DOWNING STREET, S.W., LONDON),

Principal Secretary of State for the Colonies—Right Hon. Lewis Harcourt, 7th November, 1910.

Parliamentary Under-Secretary—Lord Lucas, M.P.

Permanent Under-Secretary—Sir Francis J. S. Hopwood, K.C.B., G.C.M.G.

Assistant Under-Secretaries: Sir Charles P. Lucas, K.C.M.G., C.B.; H. B. Cox, C.B. (Legal); H. W. Just, C.B., C.M.G.; and G. V. Fiddes, C.B., C.M.G.

CROWN AGENTS FOR THE COLONIES.

WHITEHALL GARDENS, S.W. CITY OFFICE: 1 TOKENHOUSE BUILDINGS, E.C., LONDON.

Crown Agents—Reginald L. Antrobus, C.B.; Major Maurice Alexander Cameron, C.M.G., late R.E.; and William Hepworth Mercer, C.M.G.

HONOURS HELD IN CONNECTION WITH THE DOMINION.

PRIVY COUNCILLOR (P.C.).

Ward, Right Hon. Sir Joseph George, 1907.

KNIGHTS COMMANDERS OF THE MOST DISTINGUISHED ORDER OF ST. MICHAEL AND ST. GEORGE (K.C.M.G.).

Hall-Jones, Hon. Sir W., 1910.	Stout, Hon. Sir Robert, 1886.
Mills, Sir James, 1909	Ward, Right Hon. Sir Joseph George, 1901.
Perceval, Sir Westby Brook, 1894.	

KNIGHTS BACHELOR (KT. BACH.).

Bowen, Hon. Sir Charles Christopher.	O'Rorke, Hon. Sir George Maurice, 1880.
Campbell, Sir John Logan, 1902.	Prendergast, Hon. Sir James, 1881.
Kennaway, Sir Walter, 1909.	Russell, Sir William Russell, 1902.
Miller, Hon. Sir Henry John, 1901.	Steward, Hon. Sir William Jukes, 1902.
McLean, Sir George, 1909.	

COMPANIONS OF THE MOST HONOURABLE ORDER OF THE BATH (C.B.).

Cradock, Major Montagu, 1900.	Porter, Colonel T. W., 1902.
Davies, Colonel R. H., 1900.	Robin, Colonel Alfred William, 1900.
Newall, Colonel Stuart, 1900.	

COMPANIONS OF THE MOST DISTINGUISHED ORDER OF ST. MICHAEL AND ST. GEORGE (C.M.G.).

Bauchop, Lieut.-Colonel A., 1902.	Jowsey, Lieut.-Colonel Thomas, 1900.
Gudgeon, Lieut.-Colonel Walter Edward, 1890.	Richardson, Hon. Edward, 1879.
	Roberts, John, 1891.

COMPANION, DISTINGUISHED SERVICE ORDER (D.S.O.).

Abbott, Lieut.-Colonel F. W., 1902.	Polson, Major D., 1900.
Bartlett, Major E., 1902.	Stevenson, Captain R., 1902.
Hickey, Lieutenant D. A., 1902.	Todd, Captain T. J. M., 1900.
Hughes, Major J. G., 1900.	Walker, Captain G. H., 1901.
Major, Major C. T., 1900.	

COMPANION, IMPERIAL SERVICE ORDER (I.S.O.).

Collins, Colonel R. J., V.D., 1909.	Kensington, W. C., 1909.
Heywood, James B., 1905.	Logan, J. K., 1909.

ROYAL RED CROSS.

Williamson, Miss J. M. N., 1900

VICTORIA CROSS.

Hardham, Lieut. W. J., 1901.

NEW ZEALAND CROSS.

Adamson, Thomas, 1869.	Mair, Gilbert, 1870.
Biddle, Benjamin, 1869.	Northcroft, William Henry, 1910.*
Black, Solomon, 1869.	Preece, George, 1869.
Hill, George, 1869.	Roberts, John Mackintosh, 1869.
Lingard, William, 1869.	Shepherd, Richard, 1869.
Mace, Francis Joseph, 1869.	Wrigg, Harry Charles William, 1898.†
Maling, Christopher, 1869.	

* For service rendered in 1866.

† For service rendered in 1867.

DISTINGUISHED CONDUCT MEDALS AWARDED TO MEMBERS OF NEW ZEALAND CONTINGENTS IN SOUTH AFRICA (1899-1902).

Baigent, Private Ivanhoe.	Langham, Sergeant-Major J.
Black, Sergeant-Major G. C.	Lockett, Sergeant-Major E. B.
Burr, Sergeant-Major W. T.	Pickett, Sergeant-Major M.
Cassidy, Sergeant W.	Rouse, Farrier-Sergeant G.
Fletcher, Sergeant-Major W. H.	Wade, Private H. B.
Free, Private A.	White, Sergeant-Major H.
Kent, Sergeant W.	

PERSONS ALLOWED TO RETAIN THE TITLE OF "HONOURABLE" WITHIN HIS
MAJESTY'S DOMINIONS.

By despatch from the Secretary of State for the Colonies, dated Downing Street, 15th June, 1893, His Excellency the Governor was apprised that the title of "Honourable," appertaining to Members of the Executive and Legislative Councils in colonies possessing Responsible Government, whether confined to duration of office or continued for life, was approved by Her late Majesty for use and recognition throughout her dominions, either during office or for life, as the case may be.

By further despatch of 10th March, 1894, the Secretary of State announced that he was prepared in future to submit for the approval of the Sovereign the recommendation of the Governor of any colony having Responsible Government that the President of the Legislative Council or the Speaker of the Legislative Assembly may, on quitting office after three years' service in their respective offices, be permitted to retain the title of "Honourable." This title is now held by Sir G. M. O'Rorke and Major Sir William Jukes Steward.

Besides the members of the Executive and Legislative Councils, the following ex-Ministers, are allowed, as such, to retain the title of "Honourable": Bryce, John, 1884; Duncan, Thomas Y., 1906; Fergus, Thomas, 1891; Hall-Jones, William, 1908; Hislop, Thomas W., 1891; McGowan, James, 1909; Mills, Charles H., 1906; Mitchelson, Edwin, 1891; Oliver, Richard, 1884; Reeves, William P., 1896; Richardson, Hon. Edward, C.M.G., 1887; Stout, Hon. Sir Robert, K.C.M.G., 1887; Thompson, Thomas, 1900; Tole, Joseph A., 1888.

By another despatch of 14th November, 1896, the Secretary of State requested to be informed if the Government of New Zealand desired that members of the Legislative Council in this Dominion should on retirement or resignation, after a continuous service in such Council of not less than ten years, be eligible for recommendation by the Governor for Royal permission to retain the title of "Honourable."

Mr. William Montgomery has been allowed to retain the title as from 14th December, 1906, accordingly on such retirement.

RETIRED JUDGES OF SUPREME COURT.

By despatch of 29th August, 1877, it was announced that retired Judges of the Supreme Court may be allowed the privilege of bearing the title of "Honourable" for life, within the Dominion. This title is now held by Sir James Prendergast.

GOVERNOR OF NEW ZEALAND.

31st May, 1911.

ISLINGTON, His Excellency the Right Honourable John Poynder Dickson-Poynder, Baron (United Kingdom, 1910). Educated at Harrow and at Christchurch, Oxford. A Chairman of the Board of Trade Arbitration Court, Hon. Lieutenant in the army, and a Knight of Grace of the Order of Saint John of Jerusalem, in England. Formerly Lieutenant, 3rd Battalion Royal Scots (Lothian Regiment) and Major and Hon. Lieut.-Colonel Royal Wilts Yeomanry. Served in South Africa, 1900, with 1st Battalion Imperial Yeomanry (Despatches, D.S.O.). Appointed a member of the Royal Commissions on London Traffic, 1904, and Trade Relations between Canada and the West Indies, 1908. M.P. for Wiltshire, 1892-1908. Member of the London County Council, 1898-1904.

Residences : 8 Chesterfield Gardens, Mayfair, London ; Hartham Park, Corsham, Wilts, England ; Government House, Wellington ; Government House, Auckland.

Private Secretary : Arthur Guise, Esq.

1st Aide-de-Camp : Captain William John Shannon, 16th (the Queen's) Lancers.

2nd Aide-de-Camp : Captain I. MacDougall, Grenadier Guards.

Local Aide-de-Camp : Captain John Hugh Boscawen (Honorary)

EXECUTIVE COUNCIL

31ST MAY, 1911.

THE annual appropriation for Ministers' salaries is fixed by statute at the sum of £8,900, of which £1,600 is for the Prime Minister, £1,300 for the Minister for Railways, and £1,000 for each of six other Ministers. All Ministers to whom salaries are appropriated are members of the Executive Council, holding one or more of the offices specified by law. Members of the Executive Council travelling within the Dominion on public service are entitled to allowance not exceeding £1 10s. per day when so engaged, but not during the time a Minister is attending a session of the General Assembly. The members of the Executive Council to whom salaries are payable, and who are not otherwise provided with residences at the seat of Government, are entitled to an allowance in lieu thereof at the rate of £200 a year.

The Executive Council now consists of :—

His Excellency the GOVERNOR.

Right Hon. Sir Joseph George Ward, P.C., K.C.M.G., Prime Minister, Minister of Finance, Postmaster-General, Minister of Telegraphs, Minister of Defence, Minister of Lands, and Commissioner of State Forests.

Hon. James Carroll, Native Minister and Minister of Stamp Duties.

Hon. John Andrew Millar, Minister of Railways, Minister of Marine, and Minister of Labour.

Hon. George Fowlds, Minister of Education, Minister of Immigration, and Minister of Customs.

Hon. John George Findlay, K.C., LL.D., Attorney-General and Minister of Justice.

Hon. Roderick McKenzie, Minister of Public Works and Minister of Mines.

Hon. David Buddo, Minister of Internal Affairs and Minister of Public Health.

Hon. Thomas Mackenzie, Minister of Industries and Commerce, Minister of Agriculture.

Hon. Apirana Turupa Ngata (representing the Native race).

Clerk of the Executive Council—James Frank Andrews.

THE GENERAL ASSEMBLY.

LEGISLATIVE COUNCIL.

THE number of members at present constituting the Legislative Council is thirty-nine, and is not limited. Prior to 1891 Councillors summoned by the Governor held their appointments for life; but on the 17th of September of that year an Act was passed giving the Council power to elect its own Speaker for a period of five years, and making future appointments to the Council tenable for seven years only, to be reckoned from the date of the writ of summons of the Councillor's appointment, though every such Councillor may be reappointed. The qualifications are that the person to be appointed be a male of the full age of twenty-one years, and a subject of His Majesty, either natural-born or naturalized by or under any Act of the Imperial Parliament or by or under any Act of the General Assembly of New Zealand. All contractors to the public service to an amount of over £50 and Civil servants of the Dominion are ineligible as Councillors. Payment of Councillors is at the rate of £200 a year, payable monthly. Actual travelling-expenses to and from Wellington are also allowed. A deduction of £1 5s. per sitting-day is made in case of an absence exceeding fourteen sitting-days in any one session, except through illness or other unavoidable cause. Leave of absence may also be granted by His Excellency the Governor, and when so granted for a session the payment ceases from the date of the Proclamation calling Parliament to meet until the next Proclamation calling Parliament together is issued. Under the Legislature Act, a seat is vacated by any member of the Council (1) if he takes any oath or makes any declaration or acknowledgment of allegiance, obedience, or adherence to any foreign Prince or Power; or (2) if he does, or concurs in, or adopts any act whereby he may become a subject or citizen of any foreign State or Power, or is entitled to the rights, privileges, or immunities of a subject of any foreign State or Power; or (3) if he is a bankrupt, or compounds with his creditors under any Act for the time being in force; or (4) if he is a public defaulter, or is attainted of treason, or is convicted of felony or any infamous crime; or (5) if he resigns his seat by writing under his hand addressed to and accepted by the Governor; or (6) if for more than one whole session of the General Assembly he fails, without permission of the Governor notified to the Council, to give his attendance in the Council. By the Standing Orders of the Council, the presence of one-fourth of the members of the Council, exclusive of those who have leave of absence, is necessary to constitute a meeting for the exercise of its powers. This rule, however, may be altered from time to time by the Council.

The ordinary sitting-days are Tuesdays, Wednesdays, Thursdays, and Fridays, from 2.30 p.m. to 5 p.m., resuming again at 7.30 p.m. when necessary.

ROLL OF MEMBERS OF THE HONOURABLE THE LEGISLATIVE COUNCIL OF NEW ZEALAND (MAY, 1911).

Speaker—Hon. Sir C. C. BOWEN, Kt. Bach.

Chairman of Committees—Hon. W. C. F. CARNCROSS

Name.	Provincial District.	Date of Appointment.
Anstey, the Hon. John	Canterbury ..	22 January, 1907.
Baillie, the Hon. William Douglas Hall ..	Marlborough	8 March, 1861.*
Baldey, the Hon. Alfred	Otago ..	18 March, 1910.
Barr, the Hon. John	Canterbury ..	22 January, 1907.
Beehan, the Hon. William	Auckland ..	22 June, 1910.
Bowen, the Hon. Sir Charles Christopher, Kt. Bach.	Canterbury ..	23 January, 1891.*
Callan, the Hon. John Bartholomew ..	Otago ..	22 January, 1907.
Carncross, the Hon. Walter Charles Frederick	Taranaki ..	18 March, 1910.
Collins, the Hon. William Edward ..	Wellington ..	22 January, 1907.
Findlay, the Hon. John George, K.C., LL.D.	Wellington ..	23 November, 1906.
George, the Hon. Seymour Thorne ..	Auckland ..	22 June, 1910.
Gilmer, the Hon. Hamilton	Wellington ..	22 January, 1907.
Harris, the Hon. Benjamin	Auckland ..	3 February, 1910.
Jenkinson, the Hon. John Edward ..	Canterbury ..	1 July, 1907.
Johnston, the Hon. Charles John ..	Wellington ..	23 January, 1891.*
Jones, the Hon. George	Otago ..	18 December, 1909.
Kelly, the Hon. Thomas	Taranaki ..	16 October, 1906.
Loughnan, the Hon. Robert Andrew ..	Wellington ..	6 May, 1907.
Louisson, the Hon. Charles	Canterbury ..	14 January, 1908.
Luke, the Hon. Charles Manley ..	Wellington ..	22 January, 1907.
McCardle, the Hon. William Wilson ..	Auckland ..	22 January, 1907.
McGowan, the Hon. James	Auckland ..	6 January, 1909.
McLean, the Hon. Sir George, Kt. Bach.	Otago ..	19 December, 1881.*
Marshall, the Hon. James	Westland ..	17 April, 1909.
Miller, the Hon. Sir Henry John, Kt. Bach.	Otago ..	8 July, 1865.*
Mills, the Hon. Charles Houghton ..	Wellington ..	2 March, 1909.
Ormond, the Hon. John Davies ..	Hawke's Bay	20 January, 1891.*
O'Rorke, the Hon. Sir George Maurice, Kt.	Auckland ..	25 June, 1904.
Paul, the Hon. John Thomas	Otago ..	22 January, 1907.
Pere, the Hon. Wiremu	Hawke's Bay	22 January, 1907.
Rigg, the Hon. John	Wellington ..	1 July, 1907.
Samuel, the Hon. Oliver	Taranaki ..	22 January, 1907.
Sinclair, the Hon. John Robert ..	Otago ..	22 January, 1907.
Smith, the Hon. George John	Canterbury ..	22 January, 1907.
Stevens, the Hon. Edward Cephas John..	Canterbury ..	7 March, 1882.*
Thompson, the Hon. Thomas	Auckland ..	18 March, 1910.
Tucker, the Hon. William Henry ..	Auckland ..	22 January, 1907.
Wigram, the Hon. Henry Francis ..	Canterbury ..	22 June, 1910.

* Life members.

HOUSE OF REPRESENTATIVES.

The number of members constituting the House of Representatives is eighty—seventy-six Europeans and four Maoris. They are now designated Members of Parliament. The number was fixed by the Act of 1900, which came for the first time into practical operation at the general election of 1902. Previously (from 1890) the House consisted of seventy-four members, seventy Europeans and four Maoris; and previously to that (from 1881) of ninety-five members, ninety-one Europeans and four Maoris. The North Island at present returns forty-one European members, and the South Island thirty-five. The elections are triennial, except in the case of a dissolution by the Governor. Every registered elector, being of the male sex, and free from any of the disqualifications mentioned in the Legislature Act, 1908, is eligible for membership. All contractors to the public service of New Zealand to whom any public money above the sum of £50 is payable, directly or indirectly, in any one financial year, as well as the Civil servants of the Dominion, are incapable of being elected as, or of sitting or voting as, members. The payment made to members of the House of Representatives is £25 per month, amounting to £300 per annum, subject to certain deductions for absence during session not due to sickness or other unavoidable cause. Travelling-expenses to and from Wellington are also allowed. This scale of payment came into force on the 7th November, 1901, under the provisions of an Act passed in that year. Twenty members, inclusive of the Speaker, constitute a quorum. Unless otherwise ordered, the sitting-days of the House are Tuesdays, Wednesdays, Thursdays, and Fridays, from 2.30 p.m. to 5.30 p.m., resuming at 7.30 p.m. Order of admission to the Speaker's Gallery is by ticket obtained from the Speaker. The Strangers' Gallery is open free to the public.

ROLL OF MEMBERS OF PARLIAMENT (MAY, 1911) IN HOUSE OF REPRESENTATIVES.

Speaker—Hon. ARTHUR ROBERT GUINNESS.

Chairman of Committees—JAMES COLVIN.

Name.	Electoral District.	Date, when Writs made returnable.
<i>For European Electorates.</i>		
Allen, James	Bruce	21 November, 1908.
Anderson, George James ..	Mataura	"
Arnold, James Frederick ..	Dunedin Central ..	"
Bollard, John	Eden	"
Brown, John Vigor	Napier	"
Buchanan, Walter Clarke ..	Wairarapa	"
Buddo, Hon. David	Kaipoi	"
Buick, David	Palmerston	"
Buxton, Thomas	Geraldine	"
Carroll, Hon. James	Gisborne	"
Clark, Edward Henry	Chalmers	"

ROLL OF MEMBERS OF PARLIAMENT IN THE HOUSE OF REPRESENTATIVES—*continued.*

Name.	Electoral District.	Date when Writs made returnable.
<i>For European Electorates—contd.</i>		
Colvin, James	Buller	21 November, 1908.
Craigie, James	Timaru	"
Davey, Thomas Henry	Christchurch East ..	"
Dillon, Alfred	Hawke's Bay	"
Dive, Bradshaw	Egmont	"
Duncan, John	Wairau	"
Duncan, Hon. Thomas Young	Oamaru	"
Ell, Henry George	Christchurch South ..	"
Field, William Hughes	Otaki	"
Fisher, Francis Marion Bates	Wellington Central ..	"
Forbes, George William	Hurunui	"
Fowlds, Hon. George	Grey Lynn	"
Fraser, William	Wakatipu	"
Glover, Albert Edward	Auckland Central ..	"
Graham, John	Nelson	"
Greenslade, Henry James	Waikato	"
Guinness, Hon. Arthur Robert	Grey	"
Guthrie, David Henry	Oroua	"
Hall, Charles	Waipawa	"
Hanan, Josiah Alfred	Invercargill	"
Hardy, Charles Albert Creery	Selwyn	"
Herdman, Alexander Lawrence	Wellington North ..	"
Herries, William Herbert	Tauranga	"
Hine, John Bird	Stratford	"
Hogan, James Thomas	Wanganui	"
Hogg, Alexander Wilson	Masterton	"
Jennings, William Thomas	Taumarunui	"
Lang, Frederic William	Manukau	"
Laurensen, George	Lyttelton	"
Lawry, Frank	Parnell	"
Luke, John Pearce	Wellington Suburbs ..	"
MacDonald, William Donald Stuart	Bay of Plenty	"
McKenzie, Hon. Roderick	Motueka	"
Mackenzie, Hon. Thomas	Taiari	"
McLaren, David	Wellington East	"
Malcolm, Alexander Scott	Clutha	"
Mander, Francis	Marsden	"
Massey, William Ferguson	Franklin	"
Millar, Hon. John Andrew	Dunedin West	"
Myers, Arthur Mielziner	Auckland East	24 June, 1910.
Newman, Edward	Manawatu	21 November, 1908.
Nosworthy, William	Ashburton	"
Okey, Henry James Hobbs	Taranaki	"
Pearce, George Vator	Patea	"
Phillipps, Leonard Richard	Waitemata	"
Poland, Hugh	Ohinemuri	"
Poole, Charles Henry	Auckland West	"
Reed, Vernon Herbert	Bay of Islands	"
Rhodes, Robert Heaton	Ellesmere	"
Ross, Robert Beatson	Pahiatua	"
Russell, George Warren	Avon	"
Scott, Robert	Tuapeka	"
Seddon, Thomas Edward Youd	Westland	"

ROLL OF MEMBERS OF PARLIAMENT IN THE HOUSE OF REPRESENTATIVES—*continued.*

Name.	Electoral District.	Date when Writ made returnable.
<i>For European Electorates—contd.</i>		
Sidey, Thomas Kay	Dunedin South ..	21 November, 1908.
Smith, Robert William	Rangitikei ..	3 October, 1909.
Stallworthy, John	Kaipara ..	21 November, 1908.
Steward, Sir William Jukes, Kt. Bach.	Waitaki ..	"
Taylor, Edmund Harvey	Thames ..	4 February, 1909.
Taylor, Thomas Edward	Christchurch North	21 November, 1908.
Thomson, George Malcolm	Dunedin North ..	"
Thomson, John Charles	Wallace ..	"
Ward, Right Hon. Sir Joseph George, P.C., K.C.M.G.	Awarua ..	"
Wilford, Thomas Mason	Hutt ..	"
Witty, George	Riccarton ..	"
Wright, Robert Alexander	Wellington South ..	"
<i>For Maori Electorates.</i>		
Te Rangihiroa	Northern Maori ..	5 April, 1909.
Kaihau, Henare	Western Maori ..	23 December, 1908.
Ngata, Apirana Turupa	Eastern Maori ..	"
Parata, Tame	Southern Maori ..	"

OFFICIAL LIST.

1st APRIL, 1911.

LEGISLATIVE DEPARTMENTS.

LEGISLATIVE COUNCIL.

Clerk of Parliaments, Clerk of the Legislative Council, and Examiner of Standing Orders upon Private Bills—Leonard Stowe.

Clerk-Assistant and Acting Gentleman Usher of the Black Rod—A. T. Bothamley.

Second Clerk - Assistant—B. E. S. Stocker, M.A.

Interpreter—F. H. Phillips.

HOUSE OF REPRESENTATIVES.

Clerk of House—H. Otterson.

Clerk-Assistant—A. J. Rutherford.

Second Clerk-Assistant—A. F. Lowe.

Sergeant-at-Arms—Major T. V. Shepherd.

Reader and Clerk of Bills and Papers—E. W. Kane.

Record Clerk—W. E. Dasent.

Chief *Hansard* Reporter—Silas Spragg.

Hansard Reporters—W. Berry, J. M. Geddes, W. Leslie, W. H. Russell, H. M. Gore, D. H. Cameron, J. Gray, R. G. Thomson, F. W. Weston, J. W. Stevenson.

Hansard Supervisor—M. F. Marks.

Clerk of Writs—H. Pollen.

Deputy Clerk of Writs—R. F. Lynch.

Interpreter—D. E. G. Barclay.

PARLIAMENTARY LIBRARY.

Chief Librarian—Charles Wilson.

Assistant Librarian—H. L. James.

PRIME MINISTER'S OFFICE.

Prime Minister—Right Hon. Sir J. G. Ward, P.C., K.C.M.G.

Secretary to Cabinet and Clerk of the Executive Council—J. F. Andrews.

DEPARTMENT OF FINANCE.

THE TREASURY.

Minister of Finance—Right Hon. Sir J. G. Ward, P.C., K.C.M.G.

Secretary to the Treasury, Receiver-General, Paymaster-General, and Registrar of New Zealand Consols—J. W. Poynton.

Accountant to the Treasury and Deputy Registrar of New Zealand Consols—E. L. Mowbray.

Chief Clerk—A. O. Gibbes.

Cashier—C. E. Chithey.

Clerks—J. J. Esson, A. J. Morgan, H. N. W. Church, M. S. Seddon, T. J. Davis, J. A. Martin, J. H. Stock, H. Hawthorn, R. J. S. Hickson, W. Wilson, F. H. Tuckey, C. B. Carpenter, W. M. Townshend, G. C. Rodda, A. J. Tresize, F. J. Chithey, G. Scott, R. Witheford, S. Fraser, A. C. McIntyre, J. D. Naughton, C. Boyd, A. H. Duff, T. M. Highet, L. McIntosh, M. Ralston, D. M. Schramm, E. M. Bodmin, E. M. Taylor, W. L. Clapson, P. Dunstan, E. Toms, G. M. Morris, G. E. Miller, T. H. Jones, H. Stafford, C. J. Fisher, W. H. Welsh, D. E. Mackay, F. J. McCormisky, W. C. Ryan, F. W. H. Prideaux.

Cadets—J. B. Watson, D. R. Dinnie, H. Vivian, D. T. Moroney, A. P. Lewis, G. King, C. J. Dunn, E. Pearce, H. T. Hartley, J. J. Poland.

Cadette—D. Mason.

FRIENDLY SOCIETIES OFFICE.

Registrar—R. E. Hayes.

Revising Barrister—E. Y. Redward.

Actuary—A. T. Traversi.

Clerks—J. G. Roache, R. D. Spraggon, L. R. Hamilton, M. A. Bridson.

Cadets—G. E. Bradley, P. H. Jones.

NATIONAL PROVIDENT FUND.

Superintendent—R. E. Hayes.

Secretary to Board—A. T. Traversi.

LAND AND INCOME TAX DEPARTMENT.

Commissioner of Taxes—G. F. C. Campbell.

Clerk in Charge, Income-tax—J. M. King.

Clerk in Charge, Land-tax—H. Nan-carrow.

Receiver of Land and Income Tax—C. V. Kreeft.

Inspectors—W. M. Tyers, D. G. Clark, G. W. Jänisch.

Clerk in Charge, Graduated Tax—E. W. Watson.

INCOME-TAX STAFF.

Clerks—D. R. Purdie, E. J. R. Cumming, J. M. Glasgow, H. S. Barron, J. M. Park, R. Hirschberg, L. F. Allen, L. Powell, P. Hodgkins, E. M. Pytt-Jackson, N. Kennedy, E. Hyde, J. D. Eves.

Typistes—E. O'Leary, E. C. Graves, M. A. Rogers.

Cadets—H. H. A. Young, B. Black, E. L. Enting, A. A. W. Dromgool.

LAND-TAX STAFF.

Section Clerks—E. Randell, J. M. Smythe, R. R. Leys, A. S. Williamson.

Clerks—C. T. Rout, C. E. Dowland, P. H. Wood, W. H. Doyle, S. C. Lambert, M. G. Fisher, T. Hoggard, J. B. Hobart, W. B. Rhodes, J. A. Horne, St. G. A. Dowsing, J. H. Clark, F. F. Laurenson, F. Houldsworth, J. Monahan, C. Headland, E. W. Arnold, W. H. Phillips, C. Mundy, R. Grant, W. Penney, G. Walsh, H. F. Wood, J. T. D'Emden, B. Hibbard, H. L. Rosenberg, F. Bray, S. J. A. Hill, C. Sparrow, J. Coogan, W. V. Fantham, R. S. Wakelin.

Cadets—A. C. Watson, L. F. Cooper, W. G. Clinkard, R. H. Martin, E. T. Layburn.

VALUATION DEPARTMENT.

Valuer-General—F. W. Flanagan.

Officers in Charge—A. J. McGowan, Auckland; H. L. Wiggins, Christchurch; A. Clothier, Dunedin; T. L. Oswin, Invercargill.

Clerks—Wellington, J. W. Black, C. J. Lovatt, F. W. Barnett, W. A. Clachan, C. H. Biss, E. H. Fisher, T. J. Rowse, H. A. Anderson, H. J. Valentine, J. H. Shine, E. H. Eton, H. Christie, J. Guthrie, M. V. Card, G. F. Cooke, N. H. Mackie, W. Lovell, A. T. McCaw, F. K. Tucker, C. J. Hurley.

Draughtsmen—Wellington, H. H. Seed, A. E. S. Gill, F. W. Clayton; Dunedin, J. D. Hutchin.

District Valuers—W. F. Thompson, Whangarei; E. Morgan, Onehunga; B. J. Esam, Auckland; G. W. Hyde, Hamilton; W. F. Wallis, Morrinsville; F. F. McKenzie (Acting), Auckland; G. H. Lloyd, Hastings; D. Craig, Wanganui; E. P. Fowler, Taihape; J. M. Wilson, Palmerston North; H. J. C. Coutts, Masterton; J. Ames, F. N. Martin, G. Halliday (Acting), J. Wells (Acting), Wellington; E. Kenny, Picton; H. Murray, D. H. Pullar (Acting), Christchurch; J. M. Kelly, Rangiora; G. Mason, O'Kain's Bay; D. Stowell, Timaru; E. A. Atkinson, Oamaru; J. F. H. McCarthy, Dunedin; R. Milne, Milton; J. George, Lumsden; J. Smail, Gore.

Clerks—Auckland, J. B. Wallis, T. C. Somers, W. Gulliver, T. P. Gilfedder, P. G. Pearce, C. W. Chilcott; Christchurch, A. Millar, J. E. Johnston, G. J. Russell, N. Smythe, B. Nixon; Dunedin, C. de R. Andrews, M. J. Drysdale; Invercargill, A. Wyllie, W. W. King, D. P. Varcoe.

Cadets—Auckland, H. C. Fletcher, V. E. Lough; Wellington, W. G. McClintock, G. S. Rowe, B. Carter, C. H. Wynyard; Christchurch, P. J. P. Dwyer, E. J. Bridgeman, P. W. Miller; Dunedin, F. G. Glastonbury.

STAMP DEPARTMENT.

Minister of Stamp Duties—Hon. James Carroll.

Commissioner of Stamps—P. C. Corliss.

Chief Clerk—C. H. W. Dixon.

Custodian and Issuer of Stamps—W. H. Shore.

Accountant—J. P. Murphy.

Clerks—V. Willeston, C. McIntosh, G. Tinney, R. Smyth.

Chief Stamper—A. A. Somerville.

Cadets—J. McKay, B. L. Dallard, H. B. Walton.

DEPUTY COMMISSIONERS OF STAMPS.

Auckland—W. G. Fletcher.

Gisborne—R. N. Jones.

Taranaki—A. V. Sturtevant.

Hawke's Bay—F. Aspinall.

Wellington—C. H. W. Dixon.

Wanganui—G. Sampson.

Nelson—W. W. de Castro.

Marlborough—F. Broughton.

Canterbury—P. G. Withers.

Timaru—H. W. Capper.

Otago—J. Murray.

Southland—L. Pauling.

Westland—J. G. L. Hewitt.

REGISTRAR OF COMPANIES.

P. C. Corliss.

REGISTRARS OF BUILDING SOCIETIES, INDUSTRIAL AND PROVIDENT SOCIETIES, AND ASSISTANT REGISTRARS OF COMPANIES.

Auckland—W. G. Fletcher.

Poverty Bay—R. N. Jones.

Taranaki—A. V. Sturtevant.

Hawke's Bay—F. Aspinall.

Wellington—C. H. W. Dixon.

Nelson—W. W. de Castro.

Marlborough—F. Broughton.

Canterbury—P. G. Withers.

Otago—J. Murray.

Southland—L. Pauling.

Westland—J. G. L. Hewitt.

POST AND TELEGRAPH DEPARTMENT.

GENERAL POST OFFICE.

Postmaster-General and Minister of
Telegraphs—Right Hon. Sir J. G.
Ward, P.C., K.C.M.G.

Secretary, Post and Telegraph Department, and Commissioner of Old-age
Pensions—D. Robertson.

Assistant Secretary—W. R. Morris.

Chief Clerk—F. V. Waters.

Staff—J. C. Williamson (Second Clerk),
W. Crow, H. D. Grocott, J. C. Redmond,
A. T. Markmann, W. J. Gow, R. C. O'Connor,
J. E. Broadfoot, F. W. Furby, G. G. Rose, M.A.,
G. McNamara, S. Macalister, C. A. Mathieson,
J. P. P. Clouston, A. Donovan, W. I. Dawson, W. J.

Wilkie, W. H. Barnett, J. F. Brown, J. F. Wilson, C. T. Andrew, S. J. Smith, T. Mark, G. L. Popple, J. E. Hunt, J. W. Coard, D. E. Fouhy, C. E. C. Milner, A. J. Mathieson, D. G. Cody, J. A. Smyth, G. B. Farmer, N. T. Polley, A. D. Troup, E. J. R. Downard, A. C. Affleck, K. M. McGrath, A. McGill, A. J. Ryan.

Chief Telegraph Engineer—J. Orchiston.

Chief Electrician—T. Buckley.

Staff—R. Heinitz, F. Palmer, C. S. Plank, H. L. Cummings, E. C. Gage, L. L. Macey.

Controller of Money-orders and Savings-banks, and Accountant—J. L. H. Ledger.

Assistant Controller of Money-orders and Savings-banks, and Assistant Accountant—H. A. R. Huggins.

Staff—W. Chegwiddden (First Clerk), F. T. R. Johnston, H. G. Cornwall, A. J. A. Roberts, G. Levy, D. A. Jenkins, C. B. Harton, H. D. Edwards, S. J. Bolton, F. E. Beamish, P. D. Hoskins, H. C. Milne, J. C. Fairbairn, F. Stewart, W. R. Wake-
lin, A. Marshall, H. E. Combs, F. G. A. Eagles, E. White, J. Snell, M.A., F. Wilton, J. Madden, P. Cutforth, G. Foote, W. Gilbert, R. M. Porteous, D. Rutherford, A. Leeden, R. H. Twose, C. Gamble, L. C. Forgie, J. A. Humphrey, F. Williams, W. A. Smith, C. B. Burdekin, H. A. Lamb, T. A. Churches, C. H. Clinkard, H. J. Copping, N. V. Ross, D. A. McCurdy, H. A. Hamilton, A. M. Rosie, G. B. Williamson, O. L. T. Harrison, T. Brown, E. E. Mortimer, J. Macmorran, W. Findlay, J. T. Schulenburg, C. A. Jeffery,
J. C. Arthur, E. A. Wiggins, F. G. Furniss, J. K. Brooks, H. Toner, E. J. G. Loader, F. D. Andrews, S. McDowall, J. C. Paul, W. T. Bird, C. J. H. Davidson, L. F. Bruce, R. T. McElligott, J. P. J. Hanratty, V. J. Brogan, F. S. Hodson, C. W. Robinson, R. S. James, J. H. Mitchell, G. B. Brown, J. Smyth, R. G. Pullar, G. T. Kellaway, E. C. B. Wilkinson, T. P. M. Grace, C. H. Gannaway, A. J. V. Johnston, E. Bermingham, E. Harris, B. M. Kenny, M. A. M. Macleod, M. A. Asquith, E. E. Warren, E. M. Rapley, A. R. Payne, R. E. E. Alexander,

C. M. Jordan, C. A. Coady, M. Meacham, E. H. Dudley, C. M. Godsell, P. E. Mackay, J. A. Scully, M. T. Gray.

Deputy-Commissioner of Old-age Pensions—G. C. Fache.

Staff—J. A. Thomson, I. E. Wiren, F. M. Leckie, J. R. Williams, H. C. Hickson, J. H. Reynolds, J. S. Lambert, P. Cunningham, W. M. Moore, H. D. Smith, A. W. Robertson, F. W. Duske, M. McCartney, G. O. Morgan, R. P. Smyth, J. H. Buchan.

Inspector of Post-offices—G. B. Dall.

Staff—G. V. Hudson, J. Brennan, W. A. Tanner, F. S. Robins, S. M. Harrison, H. McGill, G. A. Maskew, T. O. Lambie, L. Sleightholme, C. A. E. J. Agar, E. M. Phillips, H. G. Shakes, C. O. Coad, W. A. Matthews.

Inspector of Savings-banks—R. B. Morris.

Assistant Inspector of Savings-banks—W. Gee.

Inspector of Telegraph Offices—H. W. Harrington.

Staff—W. A. Andrews, J. Robertson, W. C. Purdie.

Controller of Stores—C. B. Mann.

Assistant Controller of Stores—C. H. W. Nicholls.

Staff—J. B. Jordan, T. Palmer, W. H. Carter, M. McGilvray, J. G. Howard, J. L. Murphy, G. S. Urquhart, H. W. Cockerill, J. O'Sullivan, W. M. Krebs, F. Sutherland, R. S. Wogan, G. E. St. George, J. J. Monahan, F. L. Chapman, H. A. Johnston, M. A. White, J. A. Salmond, W. Gazley, L. C. B. Loveridge, D. O. Miller, C. Cates, A. F. Wells, F. H. Carrick.

CHIEF POSTMASTERS.

Auckland—F. D. Holdsworth.

*Thames—H. Logie.

*Gisborne—W. H. Renner.

Napier—W. J. Chaney.

*New Plymouth—A. P. Dryden.

*Wanganui—G. W. Sampson.

Wellington—D. Miller.

*Blenheim—E. Northcroft.

*Nelson—W. T. Ward.

*Westport—F. H. Dodd.

*Greymouth—T. T. King.

*Hokitika—D. St. George.

Christchurch—S. P. Stevens.

*Timaru—H. W. Capper.

*Oamaru—C. Hill.

Dunedin—W. St. G. Douglas.

*Invercargill—W. McHutcheson.

TELEGRAPH ENGINEERS.

Auckland—R. M. Baird.

Christchurch—J. W. Gannaway.

Dunedin—W. E. Chisholm.

Nelson—G. T. Kemp (Assistant).

Wellington—

ASSISTANT INSPECTORS OF POST-OFFICES.

P. Curtis (Northern District); J. H. Stevens (Central District); G. F. Furby (Acting) (Midland District); W. Isbister (Acting) (Southern District).

OFFICERS IN CHARGE OF TELEGRAPH OFFICES.

Auckland—F. G. Gannaway.

Wellington—C. H. M. Hawk.

Christchurch—B. N. Martin.

Dunedin—B. H. Keys.

BOARD OF APPEAL.

J. W. Poynton, Secretary to the Treasury (Chairman), nominated.

H. S. Wardell, nominated.

L. Anderson, Representing Postal Branch, elected.

W. R. Thompson, Representing Telegraph Branch, elected.

RAILWAYS DEPARTMENT.

Minister of Railways—Hon. J. A. Millar.

HEAD OFFICE.

General Manager—T. Ronayne.

Chief Clerk—R. W. McVilly.

Clerks—G. Brownlee, W. S. Ridler,

J. L. Day, J. O. Duff, J. Hislop,

J. E. Widdop, D. MacKellar, W. A.

Wellings, P. J. McGovern, J. Thom-

son, W. P. Miller, F. M. Sherwood,

A. J. Levick, T. H. McLean, J. A.

Jones, R. J. Walker, G. H. Hoare,

N. J. McKay, J. M. Ferriday, J. A.

Mitchell, F. K. Bevan, A. Benton,

W. M. Duncan.

Audit Inspectors—D. Munro, I. Faris,

H. Williams, J. B. Mitchell.

Chief Accountant—H. Davidson.

* Combined post and telegraph offices.

Clerks—J. H. Davies, S. P. Curtis, A. W. J. Cook, A. Morris, C. Batten, J. Firth, W. B. Fisher, E. J. Fleming, E. Davy, H. H. Leopard, R. J. Loe, W. Bourke, T. Pattle, A. H. Hunt, H. D. Smith, P. H. Smith, W. E. Ahern, F. K. Porteous, A. D. C. Gosman, T. A. O'Connor, A. E. Wilson, J. W. Dayman, W. H. Simmons, J. B. Gauntlett, P. J. Wright, E. D. H. Heaton, J. P. Treahy, R. A. Fahy, J. Jessen, A. R. Charlton, R. Trowland, F. J. Stephens, J. A. McQueen, E. G. Edwards, D. McCallum.

STORES BRANCH.

Stores Manager—H. Baxter.
Stores Audit Inspector—W. Williams.
Sawmill Manager (Kakahi)—G. Weir.
Clerks—M. C. Rowe, W. H. Chitney, A. E. Boyes, R. H. Stephens, E. J. Guinness, W. E. Curtis, J. London, P. M. Muir, F. O. Austin, C. Bearsley, W. McLeod, J. P. Harris, C. H. Nelson, A. H. G. Lambert, L. Murphy, L. W. F. Wren, A. P. Dwan, W. J. Carson, H. M. Williamson, C. Cotter, A. H. Sage.

TRAFFIC BRANCH.

Chief Traffic Manager—H. Buxton.
Clerks—G. A. C. Robieson, J. D. Nash, F. F. G. Craig.
District Managers—Auckland, T. W. Waite; Wanganui, J. E. Armstrong; Wellington, S. F. Whitcombe; Westport, J. Ashley; Westland, A. Duncan; Christchurch, W. J. Stringleman; Dunedin, C. A. Piper; Invercargill, T. W. Brebner.
Stationmasters in Charge—Whangarei, W. Sword; Kaihu, R. B. Peat; Gisborne, H. J. Day; Nelson, T. S. Edwards; Picton, A. M. Arthur.

MAINTENANCE BRANCH.

Chief Engineer for Working Railways—J. Burnett, M.Inst.C.E.
Inspecting Engineer—F. W. MacLean.
Signal Engineer—H. J. Wynne, A.M.Inst.C.E.
Railway Land Officer—G. McCartney.
Inspector of Bridge-construction—A. H. Alabaster.
Signal Inspector—J. Cheeseman.
Electrician—J. T. Fahy, A.M.I.E.E.
Electrical Mechanician—T. Hendry.
Electric Lines Inspector—E. A. Tomkies.

Office Engineer—G. A. Troup.
Draughtsmen—J. Besant, Ad. Howitt, E. Meek, D. Thomson, W. W. Fry, A. S. Henderson, H. H. Christophers.
Civil Engineering Cadets—E. E. Jenkinson, H. K. Edie, R. R. Gow.
Clerks—W. P. Hicks, W. A. Mirams, E. S. Kelly, F. W. Phillips, J. M. Robb, F. J. Rowden, W. B. Lee, A. J. McCaul, H. McAlister, P. McMaster, J. A. Devlin, P. J. Twomey, S. Perry, F. W. Baillie, F. P. Adamson, W. R. Johnston, J. A. Simpson, H. L. Andrews.

District Engineers—Auckland, D. T. McIntosh; Ohakune, J. K. Lowe; Wanganui, F. J. Jones; Wellington, F. C. Widdop; Westport and Westland, C. M. Benzoni; Christchurch, C. H. Biss; Dunedin, H. Macandrew; Invercargill, A. J. McCredie.

LOCOMOTIVE BRANCH.

Chief Mechanical Engineer—A. L. Beattie.
Clerks—J. P. Kelly, R. Aekins, D. D. Weir, B. A. Marriss, H. McKeowen, N. P. G. Ewart, L. C. Fama, J. H. Leopard, J. P. McKeowen, J. M. Porteous, E. S. Stringleman, W. Grinter, A. J. Ridler, A. Goodley, O. R. Fennell, T. C. McGrath, P. J. McEnirney, J. J. Herrick, G. R. Heginbotham, H. D. Meek, R. B. Scott, C. G. Hedge, T. C. McGrath, J. O. Wilson.
Chief Draughtsman—R. Pye-Smith.
Draughtsmen—S. H. Jenkinson, C. G. G. Berry.
Boiler Inspector—J. W. Nichols.
Locomotive Inspectors,—
North Island—G. Bowles.
South Island—A. Mackenzie.
Locomotive Engineers—Auckland, G. E. Richardson; Wellington—Napier—New Plymouth, G. A. Pearson; Hurunui—Bluff, H. H. Jackson; Westport and Westland, E. E. Gillon. Relieving, F. T. Murison.
Loco. Inspector (Thames)—C. T. Bargh.
Tech. Clerks—G. Wilson, A. L. Piper.

BOARDS OF APPEAL.

North Island.

Chairman—Alexander McArthur, appointed by the Governor.
C. P. Ryan, Clerk, Wanganui, elected.
M. Lee, Guard, Wellington, elected.

J. L. Churchouse, Ganger, Cross Creek, elected.
 D. McKenzie, Machinist, Petone, elected.
 C. G. Lee, Engine-driver, Wanganui.

South Island.

Chairman—William Reeve Haselden, appointed by the Governor.
 J. Gray, Traffic Inspector, Christchurch, elected.
 P. Gaines, Guard, Balclutha, elected.
 J. McNeely, Enginemar, Christchurch, elected.
 J. H. Jones, Turner, Addington, elected.

NATIVE DEPARTMENT.

Native Minister—Hon. James Carroll.
 Under-Secretary—Thos. W. Fisher.
 Clerks (also Private Secretary to the Native Minister)—W. T. Gordon, W. T. Pitt, J. B. Hackworth, L. A. Teutenberg, J. Harvey, C. V. Fordham, A. L. Warren.
 Translator—L. M. Grace.
 Chief Judge of Native Land Court—Jackson Palmer.
 Judges of Native Appellate Court and Native Land Court—J. W. Browne, W. E. Rawson, C. E. MacCormick, R. N. Jones, T. W. Fisher, M. Giffedder, A. G. Holland, T. H. Wilson.
 Commissioners of Native Land Court—H. W. Bishop, H. Carr, J. B. Jack, W. H. Bowler.
 Registrars of Native Land Court—Auckland, E. P. Earle; Wellington, E. A. Welch; Wanganui, A. H. Mackay; Gisborne, H. Carr.
 Clerks and Interpreters of Native Land Court—A. F. Puckey, C. W. P. Seon, W. E. Goffe, C. P. Newton, H. R. H. Balneavis, W. T. Pitt, Ware Waitai, Tiwaka Anaru, Tukere te Anga, Hare Parata, I. M. Durie, J. Sheridan.
 Presidents of Maori Land Boards—Tokerau Board, W. Dinnie; Waia-riki, J. W. Browne; Waikato and Maniapoto-Tuwharetoa, W. H. Bowler; Tairarwhiti Board, A. Keefer; Aotea Board and Te Ikaroa Board, J. B. Jack.

MAORI COUNCILS.

Minister in Charge—Hon. A. T. Ngata.
 Superintendent—J. B. Hackworth.

DEPARTMENT OF JUSTICE.

HEAD OFFICE.

Minister of Justice and Attorney-General—Hon. J. G. Findlay, LL.D., K.C.
 Under-Secretary—F. G. B. Waldegrave.
 Chief Clerk—G. C. B. Jordan.
 Clerks—G. F. Dixon, W. Gollan, H. W. Kirkwood, S. C. Hunt.
 Cadet—E. Grant.

CROWN LAW OFFICE.

Solicitor-General—J. W. Salmond, LL.B.
 Assistant Law Officers—E. Y. Redward, H. H. Ostler, T. Neave.
 Law Draftsman—W. Jolliffe.
 Clerks—E. N. G. Poulton (also Private Secretary to Attorney-General), J. Christie, J. M. Tudhope, L. M. Richardson.

PATENT OFFICE.

Registrar of Patents, Designs, and Trade Marks, Fine Arts and Dramatic Works Copyrights—J. C. Lewis.
 Clerks—Mary Eyie, J. A. Hardie.
 Cadet—G. Miller.

JUDICIAL.

Supreme Court Judges.

Chief Justice—
 Wellington—Hon. Sir R. Stout, K.C.M.G.
 Judges—
 Wellington—Theo. Cooper, F. R. Chapman, W. A. Sim.
 Auckland—W. B. Edwards.
 Christchurch—J. E. Denniston.
 Dunedin—J. S. Williams.

Registrars of the Supreme Court.

Auckland—R. E. G. Thomas.
 Hamilton—F. O. B. Loughnan.
 New Plymouth—H. S. Fitzherbert.
 Gisborne—W. A. Barton.
 Wanganui—W. Kerr.
 Palmerston North—A. D. Thomson.
 Napier—S. E. McCarthy.
 Masterton—L. G. Reid.
 Wellington—D. G. A. Cooper.
 Nelson—J. S. Evans.
 Blenheim—R. S. Florance.
 Christchurch—W. A. Hawkins.
 Westport—E. Rawson.
 Timaru—V. G. Day.
 Hokitika—J. G. L. Hewitt.
 Greymouth—A. Crooke.
 Dunedin—A. Stubbs.
 Invercargill—J. R. Colyer.

Sheriffs.

Auckland—R. E. G. Thomas.
 Taranaki—J. Terry.
 Hawke's Bay—S. E. McCarthy.
 Poverty Bay—W. A. Barton.
 Wellington—D. G. A. Cooper.
 Wairarapa—M. Foley.
 Wanganui and Rangitikei—C. A. Barton.
 Manawatu—C. J. Hewlett.
 Nelson—W. Heaps.
 Westland North—O. E. Bowling.
 Central Westland—H. Smith.
 Marlborough—F. W. Hart.
 Canterbury—W. A. Hawkins.
 Timaru—V. G. Day.
 Westland—J. G. L. Hewitt.
 Otago—A. Stubbs.
 Southland—J. R. Colyer.

Crown Solicitors.

Auckland—Hon. J. A. Tole.
 Hamilton—H. T. Gillies.
 New Plymouth—T. S. Weston, sen.
 Gisborne—J. W. Nolan.
 Napier—H. A. Cornford.
 Masterton—A. R. Bunny.
 Wellington—H. H. Ostler.
 Wanganui—G. Marshall.
 Palmerston North—C. A. Loughnan.
 Nelson—C. Y. Fell.
 Blenheim—R. McCallum.
 Westport—A. A. Wilson.
 Greymouth—M. Hannan.
 Hokitika—J. Pain.
 Christchurch—T. W. Stringer.
 Timaru—J. W. White.
 Dunedin—J. F. M. Fraser.
 Invercargill—W. Macalister.
 Oamaru—A. G. Creagh.

Stipendiary Magistrates.

Auckland—C. C. Kettle.
 Whangarei, &c.—T. Scott Smith.
 Onehunga, &c.—E. C. Cutten.
 Hamilton, &c.—F. O. Loughnan.
 Russell, &c.—R. J. Acheson.
 Rotorua, &c.—R. W. Dyer.
 Thames, &c.—F. J. Burgess.
 Gisborne, &c.—W. A. Barton.
 New Plymouth, &c.—H. S. Fitzherbert.
 Hawera, &c.—W. G. Kenrick.
 Wanganui, &c.—W. Kerr.
 Palmerston North, &c.—A. D. Thomson.
 Wellington, &c.—A. McArthur, M.A.,
 LL.D., and W. G. Riddell.
 Wairarapa, &c.—L. G. Reid.
 Napier, &c.—S. E. McCarthy.

Nelson, &c.—J. S. Evans.
 Blenheim, &c.—R. S. Florance.
 Christchurch, &c.—H. W. Bishop.
 Kaiapoi, &c.—T. A. B. Bailey.
 Timaru, &c.—V. G. Day.
 Greymouth, &c.—A. Crooke.*
 Westport, &c.—E. Rawson.*
 Hokitika, &c.—J. G. L. Hewitt.*
 Dunedin, &c.—H. Y. Widdowson.
 Oamaru, &c.—T. Hutchison.*
 Milton, &c.—J. R. Bartholomew.*
 Queenstown, &c.—H. A. Young.*
 Naseby—W. R. Haselden.*
 Invercargill, &c.—G. Cruickshank.*
 Chatham Islands—Dr. G. H. Gibson.

Official Assignees in Bankruptcy.

Auckland—W. S. Fisher.
 Wellington—A. Simpson, J.P.
 Christchurch—J. Evans.
 Dunedin—F. H. Morice.

Clerks of Magistrates' Courts.

Hamilton—H. J. Dixon.
 New Plymouth—J. Terry.
 Hawera—D. W. Mason.
 Stratford—F. Bird, jun.
 Wanganui—C. A. Barton.
 Palmerston North—C. J. Hewlett.
 Dannevirke—S. Tansley.
 Masterton—M. Foley.
 Pahiatua—D. O'Rourke.
 Timaru—T. W. Tayler.
 Oamaru—A. A. Mair.
 Invercargill—J. R. Colyer.
 Auckland—H. H. G. Ralfe.
 Rotorua—A. F. Bent.
 Gisborne—G. J. Johnstone.
 Wairoa—I. L. Crowther.
 Napier—A. Trimble.
 Hastings—T. M. Lawlor.
 Marton, &c.—H. Morgan.
 Feilding—C. V. Roberts.
 Otaki—T. O'Rourke.
 Taihape—W. Baker.
 Wellington—A. H. Holmes.
 Christchurch—W. A. D. Banks.
 Lyttelton—W. D. Wallace.
 Kaiapoi and Rangiora—A. G. Ashby.
 Waimate—W. Y. Purchase.
 Port Chalmers—G. G. Chisholm.
 Balclutha—G. H. Sherwood.

Clerks of Magistrates' and Wardens' Courts, and Receivers of Gold Revenue and Mining Registrars.

Thames—J. Jordan.
 Coromandel—F. G. Hutton.
 Paeroa and Te Aroha—H. R. Bush.

* Are also Wardens of Goldfields.

Waihi—J. McIndoe.
 Tauranga—T. R. W. Philpotts.
 Whangarei—W. J. Reeve.
 Nelson—E. C. Kelling.
 Blenheim—F. W. Hart.
 Collingwood—H. D. Bennett.
 Westport—O. E. Bowling.
 Reefton—H. Smith.
 Ahaura—G. P. Shepherd.
 Greymouth—B. Harper.
 Kumara—G. H. Harris.
 Hokitika—J. N. Nalder.
 Ashburton—J. Fitzgerald.
 Naseby, &c.—J. C. Malfroy.
 Clyde, Black's, and Alexandra—F. T. D. Jeffery.
 Cromwell—L. M. Tansey.
 Queenstown and Arrowtown—A. J. Thompson.
 Lawrence—J. M. Adam.
 Gore—G. H. Lang.
 Riverton and Orepuki—D. P. Phillips.
 Dunedin (Hindon)—R. P. Ward.

CORONERS.

Auckland, T. Gresham; Arrowtown, H. Graham; Carterton, J. T. M. Hornsby; Coromandel, A. R. H. Swindley; Collingwood, E. Davidson; Dannevirke, T. L. Buick; Dunedin, C. C. Graham; Feilding, J. J. Bagnall; Foxton, A. Fraser; Hamilton, J. S. Bond; Kawhia, T. D. Hamilton; Levin, W. C. Nation; Marton, J. J. McDonald; New Plymouth, J. Mackay; Ohakune, E. G. Allsworth; Onehunga, D. A. Sutherland; Opotiki, P. A. Crawford; Otahuhu, A. R. Harris; Paeroa, J. Nathan; Pahi, J. B. Ariell; Port Albert, L. P. Becroft; Queenstown, L. Hotop; Raglan, W. H. Wallis; Taihape, J. P. Aldridge; Takaka, A. Sinclair; Tapanui, W. Quin; Taumarunui, A. S. Laird; Tauranga, T. E. Price; Te Awamutu, J. B. Teasdale; Te Kopuru, T. Webb; Te Puke, C. Lally; Thames, W. H. Lucas; Waihi, W. M. Wallnutt; Waipawa, J. C. Taylor; Waiuku, W. J. King; Warkworth, H. R. French; Westport, G. B. Sinclair; Whangarei, J. M. Killen; Woodville, E. J. Gothard. All Stipendiary Magistrates are *ex officio* Coroners.

PRISONS.

Inspector—Dr. T. F. Hay, M.B., C.M.
 Visiting Adviser—Rev. J. A. L. Kayll.

Gaolers—Auckland, Thomas Rosson; Pointon; Dunedin, J. C. Scanlon; Invercargill, Michael Hawkins; Lyttelton, A. W. Ironside; Napier, A. Gideon; New Plymouth, J. Coyle; Wellington, S. G. Millington; Waio-tapu, J. Down; Hanmer Springs, W. Ayling; Waipa Valley, T. H. Moynihan.

COOK ISLANDS ADMINISTRATION.

Resident Commissioner, Cook and other Islands—Captain J. E. Smith.
 Resident Commissioner, Niue—H. G. Cornwall.

POLICE.

Head Office.

Commissioner—F. G. B. Waldegrave.
 Chief Clerk—C. E. Matthews.
 Clerks—R. F. Madden, J. Evans, A. Hall, E. Stewart.
 Chief Detective—W. B. McIlveney.
 Finger-print Expert—E. W. Dinnie.
 Editor *Police Gazette*—W. McGill.
 Police Storekeeper—A. Muggerridge.

Police Force.

Inspectors—John Cullen, John Wybrant Ellison, Nicholas Kiely, Edward Wilson, Alfred James Mitchell, Patrick Black, John Dwyer, John O'Donovan, Arthur Hobbins Wright.
 Sub-Inspectors—Samuel Percival Norwood, William John Phair, Joseph Albert McGrath, Charles William Hendrey, Alexander Cruickshank, Bartholomew Sheehan.

LAND TRANSFER AND DEEDS
REGISTRY.

Registrar-General of Land and Deeds—G. G. Bridges.
 Secretary, Land and Deeds—P. C. Corliss.
 Accountant—J. C. Murphy.

DISTRICT LAND REGISTRARS AND
REGISTRARS OF DEEDS.

Auckland—T. Hall.
 Taranaki—H. S. Fitzherbert.
 Wellington—G. G. Bridges.
 Hawke's Bay—F. Aspinall.
 Poverty Bay—R. N. Jones.
 Nelson—J. S. Evans.
 Marlborough—R. Stone Florence.

Canterbury—W. Wyinks.
 Otago—C. E. Nalder.
 Southland—L. Pauling.
 Westland—J. G. L. Hewitt.

EXAMINERS OF TITLES.

Auckland—T. Hall.
 Taranaki—H. S. Fitzherbert.
 Wellington—G. G. Bridges.
 Hawke's Bay—F. Aspinall.
 Poverty Bay—R. N. Jones.
 Nelson—J. S. Evans.
 Marlborough—R. Stone Florance.
 Canterbury—W. Wyinks.
 Otago—C. E. Nalder.
 Southland—L. Pauling.
 Westland—J. G. L. Hewitt.

MINES DEPARTMENT.

Minister of Mines—Hon. Roderick McKenzie.
 Private Secretary—J. H. McAlister.

HEAD OFFICE.

Under-Secretary for Mines—H. J. H. Blow.
 Chief Clerk—H. E. Radcliffe.
 Clerks—G. Girling-Butcher, J. T. Watkins, T. H. Sherwood, A. N. Polson.

INSPECTION OF MINES.

Inspecting Engineer and Inspector of Mines—Frank Reed, M.I.M.E.
 District Inspectors:—Thames and Auckland Districts—Boyd Bennie and Matthew Paul; Clerk, G. S. W. R. Hanson: Canterbury, Otago, and Southland Districts—E. R. Green and Thomas Thomson; Clerk, H. Paton: West Coast Districts—J. Newton (Westport), A. H. Richards (Hokitika), A. Whitley (Reefton).

MANAGERS OF WATER-RACES.

Waimea-Kumara—J. Rochford.
 Mount Ida—R. Murray.

GEOLOGICAL SURVEY BRANCH.

Director—
 General Geologist—P. G. Morgan, M.A.
 Mining Geologist—

SCHOOLS OF MINES.

Lecturers and Instructors:—Thames—W. H. Baker, B.Sc.; Assistant, W. A.

Given, M.A.: Coromandel—J. McPadden: Waihi—A. H. V. Morgan, M.A.: Karangahake—R. B. McDuff: Reefton—J. Henderson, M.A., D.Sc.: Westport—G. L. Hercus.

BOARD OF EXAMINERS UNDER THE COAL-MINES ACT, 1908.

The Director, Geological Survey; the Surveyor-General; the Inspecting Engineer of Mines; the Chief Inspector of Machinery, Wellington; James Bishop; Jonathan Dixon; and H. A. Gordon, F.G.S.

BOARD OF EXAMINERS UNDER THE MINING ACT, 1908.

Same official members as above Board, excepting the Chief Inspector of Machinery, Wellington, with the following private members: H. A. Gordon, F.G.S., Auckland; T. Gilmour, Waihi; Benjamin Sutherland, Reefton; and H. P. Hornibrook, Coromandel.

The Director of Geological Survey is Chairman of both Boards, and H. E. Radcliffe is the Secretary.

STATE COAL-MINES.

General Manager—W. C. Gasquoine.
 Mine-manager, Point Elizabeth Colliery, Greymouth—James Bishop.
 Mine-manager, Seddonville Colliery, Westport—J. A. James.
 Accountant—L. H. Eilers.
 Agent, Westport—A. W. Wilson.
 Depot Agent, Wellington—T. Quinlivan.
 Depot Agent, Christchurch—W. H. Crothers.
 Depot Agent, Wanganui—F. A. Nalder.
 Depot Agent, Dunedin—F. J. Gunn.

DEPARTMENT OF INTERNAL AFFAIRS.

Minister of Internal Affairs—Hon. David Buddo.
 Under-Secretary—Hugh Pollen.
 Officer in Charge of Government Buildings—W. H. Hennah.

AUDIT OFFICE.

Controller and Auditor-General—Colonel R. J. Collins, I.S.O.

Deputy Controller and Auditor-General and Chief Clerk—P. Purvis Webb.

Audit Inspectors—A. A. Bethune, C. G. Collins, A. W. Eames, J. H. Fowler, R. A. Gray, C. P. Johnson, L. B. Jordan, H. A. Lamb, B. A. Meek, C. A. Ralston, J. Ward, H. Wylie, O. R. Younghusband.

Audit Officer, London—T. H. Hamer.

Examiners—A. M. Adams, A. A. Cairns, E. A. Casey, G. C. Cooke, J. C. A. Dudley, J. T. Dumbell, H. Eastgate, C. E. Easton, L. H. Edwards, A. E. Fowler, G. S. Gapper, R. Garriock, T. S. Hamer, J. Mc. Hamilton, F. M. Hay, A. Hore, D. C. Innes, E. S. Innes, W. W. Knowles, K. D. MacLeod, H. L. Marbrook, H. M. Nalder, G. H. Richardson, A. G. Robinson, J. P. Rutherford, G. G. Smith, E. E. Smythe, R. M. Sunley, F. J. Taylor, H. T. Thompson, T. Treahy, A. Watters, A. W. Whyte.

Cadets—T. Auton, R. J. Miller, C. D. Thompson, C. Chamberlain.

REGISTRAR-GENERAL'S OFFICE.

Registrar-General—F. W. Mansfield.
Government Statistician—M. Fraser.
Deputy Registrar-General and Chief Clerk—W. W. Cook.

Clerks—F. H. Machattie, S. Coffey, M. A. Ashenden, R. G. Poulton, R. Kirker, J. W. Butcher, H. Alley.
Shorthand-writers and Typistes—E. M. Swift, L. Dixon.

Cadets—R. C. Barkle, R. R. Coppock.

Registrars of Births, Deaths, and Marriages—Four Chief Towns.

Auckland—T. Culpan.

Wellington—G. G. Hodgkins.

Christchurch—L. C. Williams.

Dunedin—H. Maxwell.

(There are also 227 other District Registrars located throughout the Dominion.)

ELECTORAL.

Minister in Charge—Right Hon. Sir J. G. Ward, P.C., K.C.M.G.

Chief Electoral Officer—F. W. Mansfield.

Clerk in Charge—F. Evans.

Clerks—J. D. Ferguson, G. A. Cormack, A. G. Wiffin, W. A. von Keisenberg.

Typiste—R. Rees.

HIGH COMMISSIONER'S OFFICE.

High Commissioner—Hon. Sir W. Hall-Jones.

Secretary—C. F. W. Palliser.

Trade and Immigration Representative—T. E. Donne.

Accountant—G. F. Copus.

Produce Commissioner—H. C. Cameron.

Veterinarian—A. Crabb, M.R.C.V.S.

DOMINION MUSEUM AND OBSERVATORY.

Director—A. Hamilton.

Astronomical Observer—T. King.

NEW ZEALAND INSTITUTE.

President—T. F. Cheeseman, F.L.S.

Hon. Treasurer—Professor T. H. Easterfield.

Secretary—B. C. Aston.

ADVERTISING OFFICE.

Clerk in Charge—P. J. Kelleher.

Clerks—J. E. Hull, R. Jenkins, R. S. Cunliffe, T. Lynch.

DOMINION CHEMICAL LABORATORY.

Dominion Analyst—James S. Mac-laurin, D.Sc., F.C.S.

Agricultural Chemist—B. C. Aston.

Mining Chemist—W. Donovan.

BACTERIOLOGICAL LABORATORY.

Government Pathologist—R. H. McGill, M.D. Edin., D.P.H., Camb.

Bacteriologist—J. A. Hurley.

PRINTING AND STATIONERY.

Minister in Charge—Hon. J. A. Millar.

Government Printer, Stationery Office Manager, and Controller of Stamp Printing—John Mackay.

Chief Clerk and Accountant—B. B. Allen.

Clerks—J. W. Hall, R. Watts, A. Stace, W. Hutchings, A. Williams, G. Garnham, C. T. Williams, P. C. Jordan, C. P. Cogsgrove.

Computer—R. G. Dagger.

Typiste—A. Anderson.

Cadettes—H. V. Wilson, A. Besant.

Copy Supervisor—M. F. Marks.

Mechanical Division.

Superintending Overseer—W. A. G. Skinner.

Printing Branch—

Overseers—W. P. McGirr, G. H. Loney, F. H. Mountier, H. C. Jones, W. L. Gibson.

Chief Reader—H. S. Mountier.
 Stereotyper and Electrotyper—R. Usmar.
 Railway-ticket Printer—H. B. D. Swain.
 Monotype Expert—E. J. Hampton.
 Machine-room—
 Overseer—J. Phillips.
 Sub-overseers—W. Weaver, J. R. Donald.
 Binding Branch—
 Overseer—G. H. Broad.
 Sub-overseer—J. Rutter.
 Forewoman—A. O'Malley.
 Stamp Branch—
 Overseer—J. Burns.
 Lithographic and Photographic Br'ch—
 Overseer—D. Ross.
 Chief Draughtsman—G. N. Sturtevant.
 Engineer—T. E. King.

MENTAL HOSPITALS.

Inspector-General—Frank Hay, M.B., C.M.
 Assistant Inspectors—St. Leger H. Gribben, M.D., and Miss Hester Maclean.
 Chief Clerk—D. Souter.
 Medical Superintendent, Auckland Mental Hospital—R. M. Beattie, M.B.
 Medical Superintendent, Christchurch Mental Hospital—W. Baxter Gow, M.D.
 Medical Superintendent, Porirua Mental Hospital—Gray Hassell, M.D.
 Medical Superintendent, Seacliff Mental Hospital—F. Truby King, M.B.
 Medical Superintendent, Nelson Mental Hospital—William James Mackay, M.D.
 Superintendent, Hokitika Mental Hospital—John Downey; Medical Officer—H. Macandrew, M.B.
 Ashburn Hall, Wakari (private hospital)—Proprietors, Executor of James Hume, Dr. W. Brown, and Dr. E. H. Alexander; Medical Officer, E. H. Alexander, M.B., C.M.
 Home for Defectives, Richmond—Steward, Henry Buttle; Matron, Matilda C. Buttle.

HOSPITALS AND CHARITABLE AID AND PUBLIC HEALTH.

Inspector-General of Hospitals and Chief Health Officer—T. H. A. Valentine, M.R.C.S., L.R.C.P., D.P.H.

Medical Secretary—J. P. Frengley, M.D., F.R.C.S., D.P.H.
 Assistant Inspectors—Miss Hester Maclean, Miss J. Bicknell, Miss A. Bagley.
 Chief Clerk—E. A. S. Killick.
 Clerks—H. Magrath, C. W. Steward, L. J. Ell.
 Shorthand-writers and Typistes—G. Craig, G. Martelli.
 Cadet—A. O. von Keisenberg.
 District Health Officers—Auckland, Dr. R. H. Makgill; Napier, Dr. F. I. De Lisle; Wellington, Dr. J. P. Frengley, Dr. Chesson; Christchurch, Dr. H. E. Finch (also Assistant Inspector of Hospitals); Dunedin, Dr. S. Chamtaloup.

Port Health Officers—Hokianga, vacant; Whangarei, Dr. W. W. Baxter; Kaipara, Dr. W. H. Horton; Helensville, Dr. Max Meinhold; Whitianga, Dr. K. F. Gordon; Auckland, Dr. E. W. Sharman; Onehunga, Dr. W. G. Scott; Thames, Dr. Walshe; Gisborne, Dr. J. W. Williams; New Plymouth, Dr. H. A. McClelland; Napier, Dr. T. C. Moore; Wanganui, Dr. A. Wilson; Wellington, Dr. H. Pollen; Picton, Dr. W. E. Redman; Nelson, Dr. F. A. Bett; Westport, Dr. G. Hallwright; Greymouth, Dr. C. G. F. Morice; Lyttelton, Dr. C. H. Upham; Timaru, Dr. C. E. Thomas; Oamaru, Dr. A. Douglas; Bluff, Dr. J. Torrance; Chatham Islands, Dr. G. H. Gibson.
 Chief Sanitary Inspector—C. A. Schauer, Wellington.

DEPARTMENT OF DEFENCE.

Minister of Defence—Right Hon. Sir Joseph George Ward, P.C., K.C.M.G.
 Private Secretary—James Hislop.

HEADQUARTERS NEW ZEALAND MILITARY FORCES (WELLINGTON).

Commandant and General Officer Commanding N.Z. Forces—Major-General Alexander John Godley, C.B., p.s.c., Imperial General Staff.
 Staff Officer to Commandant and Assistant Military Secretary—Captain D. C. Spencer-Smith, R.F.A.
 Chief Clerk—W. E. Butler.

DOMINION SECTION OF THE IMPERIAL GENERAL STAFF.

Director of Staff Duties and Military Training—~~✂~~ Colonel E. S. Heard, *p.s.c.*, Imperial General Staff.

Officers Attached to General Staff—

~~✂~~ Major J. G. Hughes, D.S.O., N.Z. Staff Corps; Captain W. L. Robinson, N.Z. Staff Corps; Lieutenant C. F. Thornton, N.Z. Staff Corps.

Director of Military Operations—~~✂~~ Lieut.-Colonel J. T. Burnett-Stuart, D.S.O., *p.s.c.*, Imperial General Staff.

*Officer Attached to General Staff—*Captain G. S. Richardson, N.Z. Staff Corps.

DEPARTMENT OF THE ADJUTANT-GENERAL AND QUARTERMASTER-GENERAL.

Adjutant-General and Quartermaster-General ~~✂~~ Colonel A. W. Robin, C.B., N.Z. Staff Corps.

Assistant Adjutant-General—~~✂~~ Captain R. O. Chesney, N.Z. Staff Corps.

Assistant Quartermaster-General—~~✂~~ Captain H. H. Browne, N.Z. Staff Corps.

Director of Medical Services—Colonel J. R. Purdy, N.Z. Medical Corps.

Director of Veterinary Services and Remounts—Lieut.-Colonel C. J. Reakes, N.Z. Vet. Corps.

Director of Supplies and Transport—Captain H. O. Knox, Army Service Corps.

Director of Equipment and Military Stores—Hon. Captain J. O'Sullivan.
Assistant Director—Hon. Lieutenant F. Silver.

DEPARTMENT OF THE DIRECTOR OF ORDNANCE.

Director of Ordnance and Inspector of Artillery—Lieut.-Colonel G. N. Johnston, R.G.A.

Testing Officer S.A. Ammunition (Auckland)—Regimental Sergeant-major A. Duvall, R.A.

Armourers—Staff Sergeant Bertram Buckley, A.O.C.; Staff Sergeant John Hunter, A.O.C.; Staff Sergeant William E. Luckman, A.O.C.

FINANCE BRANCH.

Director of Accountants—F. B. Mabin.
Accountant—H. M. Griffen.

HEADQUARTERS OFFICE.

Clerical Branch.

Record Clerk—D. S. Lyons.

Clerks—Lieutenant J. F. Rockstrow.
W. R. Collett, G. F. Rudkin, A. W. Jackson, R. Fordyce, L. F. O'Neill.
T. J. Collerton, E. Fennessy, F. Bond, J. B. Ryan, J. Swift.

Clerical Cadets—E. J. Scott, H. G. Wilson.

Typistes and Shorthand-writers—Miss M. I. Davidson, Miss A. Tyerman.

DISTRICT COMMANDS.

Auckland.

Officer Commanding District—Lieut.-Colonel (temporary Colonel) George Cecil Burleigh Wolfe, N.Z. Staff Corps (late Captain R.M.L.I.).

Assistant Adjutant and Quartermaster-General—Captain Robert Carpenter, N.Z. Staff Corps.

Wellington.

Officer Commanding District—~~✂~~ Lieut.-Colonel (temporary Colonel) Edward Walter Clervaux Chaytor, *p.s.c.*, N.Z. Staff Corps.

Assistant Adjutant and Quartermaster-General—~~✂~~ Lieutenant John Thomas Bosworth, N.Z. Staff Corps.

Canterbury.

Officer Commanding District—Lieut.-Colonel (temporary Colonel) John Edward Hawkins (V.D.), N.Z. Staff Corps.

Assistant Adjutant and Quartermaster-General—Captain Harry R. Potter, N.Z. Staff Corps.

Otago.

Officer Commanding District—Lieut.-Colonel (temporary Colonel) Vere Staunton Smyth, N.Z.M. (Reserve of Officers), late H.M. Royal Warwickshire Regiment.

Assistant Adjutant and Quartermaster-General—Captain Daniel A. Hickey, D.S.O., N.Z. Staff Corps.

PERMANENT FORCE.

Officer Commanding—~~✂~~ Major J. E. Hume, R.N.Z.A. (temporarily).

COAST DEFENCES.

Coast Defence Commander—Lieut.-Colonel G. F. C. Campbell, N.Z.G.A.

Staff Officer—Major J. E. Hume,
R.N.Z.A.

DETACHMENT ROYAL N.Z. ARTILLERY.
Auckland.

Captains—George E. B. Mickle, Raynor
Barrington Smythe.

ROYAL NEW ZEALAND ARTILLERY.
Wellington.

Major—John Edward Hume.

Captains—Murray Menzies Gardner,
Frank Symon.

Lieutenant—Ivon Tatham Standish,
undergoing instruction in England.

DETACHMENT ROYAL N.Z. ARTILLERY.
Lyttelton.

Captain—Herbert Edward Pilkington.

Dunedin.

Captain—Sydney George Sandle.

DEPARTMENT OF TRADE AND CUSTOMS.

Minister of Customs—Hon. George
Fowlds.

Secretary—W. B. Montgomery.

Inspector and Collector—C. S. Nixon.

Chief Clerk—G. Craig, LL.B.

Clerks, Customs—G. F. McKellar,
J. H. Chapman, R. J. Gray, W. C.
Thomas.

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Wellington, Marlborough, Nelson, and Westland Industrial Districts—P. Hally (Wellington).

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Assistant Land Drainage Engineer—O. N. Campbell.

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Receiver of Land Revenue—Gisborne, H. W. C. Mackintosh.

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 Wanganui—
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 Assistant Director—J. L. Bruce.
 Senior Veterinarian—J. G. Clayton, M.R.C.V.S.
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District Manager—J. C. Prudhoe.
Chief Clerk—J. K. Blenkhorn.
Clerks—P. M. West, F. P. Cleary.

TIMARU AGENCY.

Resident Agent—S. T. Wicksteed.

OAMARU AGENCY.

District Manager—A. W. G. Burnes.

DUNEDIN AGENCY.

District Manager—M. J. K. Heywood.
Chief Clerk—O. H. Pinel.
Clerks—T. P. Laurenson, L. F. Casey.

INVERCARGILL AGENCY.

District Manager—J. Findlay.
Clerks—J. Hendry, R. M. McLean.

STATE FIRE INSURANCE OFFICE.

HEAD OFFICE.

General Manager—C. R. C. Robieson.
Deputy General Manager—J. H. Jerram.
Accountant—C. B. Redward.
Fire Surveyor—A. L. Berry.
Corresponding and Record Clerk—O. S. Jones.
Clerks—E. C. Little, R. H. Newbold, V. T. N. Beasley, W. C. Arthur, R. J. McLean, S. O. Jones, W. E. Watson.
Cadets—E. MacPherson, J. H. Dick, F. C. Haycraft, L. W. Probert, A. H. Pollen, J. L. Inkster, J. B. Walter.
Inspector—H. C. Rogers.

BRANCHES.

Auckland.

Manager—F. H. Pope.
 Chief Clerk—F. R. Gruszning.
 Clerk—H. H. S. Rodgers.
 Cadets—E. J. Mander, G. L. P. Brookfield, W. T. Blight.
 Typiste—Miss F. Buck.

Canterbury.

Manager—F. J. G. Wilkinson.
 Chief Clerk—H. J. Thomson.
 Clerk—D. Morrison.
 Cadets—W. L. Jackman, T. L. Seator, L. G. G. Cameron, H. W. Lomas.
 Typiste—Miss E. A. Paton.

Otago and Southland.

Manager—L. H. Osborne.
 Chief Clerk—P. H. Smith.
 Cadets—A. J. Muirhead, G. G. Slater.
 Typiste—Miss A. Arnold.

Palmerston North.

Manager—R. H. Pavitt.
 Cadet—S. A. Parker.

Taranaki (New Plymouth).

Manager—K. B. Bain.
 Cadet—G. A. Hayden.

NEW ZEALAND STATE - GUARANTEED ADVANCES DEPARTMENT.

Minister in Charge—Right Hon. Sir J. G. Ward, P.C., K.C.M.G.

Advances Board—*Ex officio* members—The Minister, Chairman of Board, the Superintendent, the Public Trustee, and the Solicitor-General. Unofficial members—Messrs. Henry Kember and J. K. Warburton.

Superintendent—J. W. Poynton.

Deputy Superintendent—W. Waddell.

Accountant—W. N. Hinchliffe.

Solicitor—J. B. Christie.

Clerk in Charge—J. E. Thompson.

Clerk in Charge, Insurance and Correspondence—C. T. Fraser.

Cashier—A. A. Prichard.

Ledger-keeper—A. W. Knowles.

Clerks—T. W. Foote, W. Auld, W. McGoldrick, J. A. Hay, C. D. Wilson, F. W. Crombie, J. M. Hutchison, W. H. Cooper, J. F. O'Leary, A. L. Hackworth, E. H. Wood, J. T. E. Harrap, N. J. Thomas, R. Robert-

son, A. J. R. Isherwood, J. Cattell, A. F. Newbold, S. Astin, A. Cur-tayne, F. J. R. Gledhill, H. F. White.

Legal Branch—S. Piggin (in charge Workers' Branch), G. Mackley, F. North, A. Esam, T. H. Giles.

Typist—F. W. Crombie (in charge).

Typistes—M. W. Ahern, E. Hishon, M. M. Lyons, R. Marchant, E. Robinson.

Cadets—H. K. Douglas, E. V. Paul, H. E. Dowdy, N. D. Vallance, G. L. Morison, C. M. Murray, T. Fawcett, W. C. Neal, A. J. Kilsby, R. Hall, W. H. Pearce, G. E. Alley, A. O. Williams, T. Twomey, B. F. X. Doherty, A. M. Johnston, F. J. Passmore, C. G. Wilson.

PUBLIC WORKS DEPARTMENT.

HEAD OFFICE.

Minister of Public Works—Hon. R. McKenzie.

Under-Secretary—H. J. H. Blow.

Assistant Under-Secretary—W. S. Short (solicitor).

Engineer-in-Chief—R. W. Holmes, M.Inst.C.E.

Electrical Engineer—E. Parry, B.Sc., A.M.I.C.E., A.M.I.E.E.

Assistant Electrical Engineer—L. Birks, B.Sc., A.M.I.C.E., A.M.I.E.E.

Superintending Engineer—C. R. Vickerman.

Inspecting Engineer of Roads—A. B. Wright.

Assistant Engineers—F. C. Hay, A.M.I.C.E., J. D. Holmes.

Architect—J. Campbell, F.R.I.B.A.

Chief Clerk—W. D. Dumbell.

Assistant Chief Clerk—G. C. Schmidt.

Accountant—G. J. Clapham.

Assistant Accountant—C. E. Bennett.

Land-purchase Officer—E. Bold.

Fire Inspector—W. H. Hennah.

Record Clerk—H. W. H. Millais.

Clerks—P. S. Waldie, J. O. Anson, A.

H. Kimbell, C. E. Crawford, A. W.

Innes, W. McNamara, J. Thompson,

H. F. Curtis, L. White, J. Connell,

J. W. Black, J. J. Bennett, F. A.

Lewis, P. J. Fennell, W. H. Scale,

A. O. Leach, J. D. Brosnan, W. L.

J. Mellisop, G. F. Edenborough, G.

F. Jackson, O. Ellison, W. H. T.

Mardon, S. L. Searell, E. A. Pettit.

Chief Draughtsman—W. G. Rutherford.

Draughtsmen—C. H. Pierard, L. L. Richards, J. P. Nicoll, T. J. McCosker, W. G. C. Swan, J. B. Robertson, R. Walker, H. C. North, A. F. Macrae, A. W. Kemp, A. Stevenson, C. E. Paton, A. E. Wilson, W. Stewart, G. H. Murray, J. Anderson, J. Stratford, A. T. Ford, D. C. Hay, E. Hitchcock, C. McKeegan, H. L. Hickson.

Head Storekeeper—J. C. Fulton.

Engineering Cadets—R. H. P. Ronayne, E. F. Evans, W. H. Bennett, F. W. Lindup, C. H. McClelland, G. L. Laurenson.

Architectural and Drafting Cadets—R. C. Caigou, R. A. Patterson, M. King, W. N. M. Weir, F. G. Bradley.

Clerical Cadets—F. S. Read, G. D. Turnbull, J. Murphy, C. O. Miller, C. N. Rabone, W. L. Chapman, J. M. Coleman.

Clerical Cadette—K. F. Haldane.

Messengers—H. T. Foster, A. E. Climo.

DISTRICT OFFICES.

District Engineers—Auckland, J. A. Wilson, M.I.C.E.; Tauranga, G. L. Cook, M.Inst.C.E.; Wellington, J. D. Louch, A.M.I.C.E.; Dunedin, F. W. Furkert, A.M.I.C.E.

Resident Engineers—Whangarei, J. E. W. McEnnis; Stratford, C. J. McKenzie; Otoko (Gisborne), C. E. Armstrong; Greymouth, J. H. Lewis; Christchurch, H. Vickerman, B.Sc., A.M.I.C.E.; Nelson, S. J. Harding; Invercargill, J. H. Treseder.

Resident Road Engineers—F. B. Wither; G. T. Murray, A.M.I.C.E.; R. H. Reaney.

Assistant Engineers in Charge—Blenheim, H. H. Sharp; Westport, J. Wood.

Assistant Engineers—J. Thorpe, W. Widdowson, J. Meenan, J. H. Dobson, J. Hannah, G. A. M. Luff, H. Dickson, J. V. Haskell, F. T. M. Kissel, A. Ross, A. Stewart, J. J. Wilson, F. S. Dyson, L. B. Campbell, J. Norris, P. Keller, H. Patterson, G. G. Wilson, W. Hall-Jones, A. J. Baker, T. M. Ball, G. H. J. Mellsop, T. M. Crawford, W. G. Pearce, J. R. Marks.

Assistant Road Engineers—T. Burd, C. H. Williams, D. N. McMillan, W. Nathan, E. M. Donaldson.

Engineering Cadets—H. Watkinson, A. D. Thorpe, W. S. King, H. G. Shannon, T. G. C. Mackay, L. W. Wogan, A. C. Smith, C. W. Salmon, G. S. Bogle, J. E. Anderson, R. A. Wilson, R. L. Kaye, R. H. Packwood, O. G. Thornton, F. N. Thompson, L. May, W. L. Newnham, F. Langbein, H. S. Hills, A. Tyndall, G. G. Lowe, G. W. Albertson, J. Rochford, S. G. Patterson, T. D. H. Alderton, H. Newton, T. D. McLean.

Architectural and Drafting Cadets—T. C. V. Rabone, W. H. Milne.

Draughtsmen—W. H. Hislop, J. J. Fraser, E. C. Farr, W. J. C. Slane, S. B. Dodge, L. H. Keals, W. N. Anderson, F. I. Ellis, W. H. Gilmour, C. H. Lawn, J. R. Cade, J. Kelly, H. C. Heays, G. More, T. S. Goudie, A. B. Childs, B. F. Kelly, G. Brown, T. S. Cray, A. E. Kennedy.

Clerks—G. A. Kallender, C. T. Rushbrook, J. H. Denton, F. P. Manson, W. J. Wiggs, P. S. Foley, F. H. Ibbetson, E. G. Beale, S. d'A. Grut, W. Merson, A. J. Sutcliffe, L. M. Shera, St. J. A. White, P. W. Willson, N. J. Ryan, E. H. Baker, A. D. Park, L. Cooper, C. A. Turner, J. Holroyd, H. M. O'Donnell, W. H. Boys, A. Ross, J. H. Irvine, E. J. Edwards, E. Twohill, A. J. Archer, T. C. Duncan, J. G. B. Hannah, D. Carman, W. Sotheran, H. Colvin, V. C. Curtis, W. S. Turner, J. J. Gibson, W. T. Birchall, R. Lindsay, W. S. Ferguson, T. Lockhead, S. A. Holland, E. J. Colquhoun, F. K. Wilkie, H. L. Powell, C. A. Carmine, J. A. Wilkinson.

Clerical Cadets—R. J. Potts, R. J. Mathers, F. C. Stewart, J. D. Stack, K. R. Watson, J. A. Shannon, H. G. M. Priestly, A. B. Robson, L. O. Chamberlain, T. Hohapata, I. D. Shearer, F. V. Brown.

Storekeepers—S. J. Moncrieff, J. Nutting, C. B. Gollop, S. E. Vaile, W. H. Gibbs, G. R. Drury.

Messenger—W. J. Monds.

PUBLIC WORKS TENDERS BOARD.

Minister of Public Works (President),
Under-Secretary for Public Works,
Engineer-in-Chief of Public Works,
General Manager of Railways, and
Government Architect. Secretary to
Board, G. C. Schmidt.

PUBLIC SERVICE SUPERANNUATION.

On 1st January, 1908, a fund was established to provide annual allowances to officers of the public service on their retirement on account of age, infirmity, or length of service. All branches of the service are included, excepting the Railways Department and Teachers, these being provided with separate funds. The fund is supported by contributions from members, regulated according to age at time of joining the fund, and a fixed sum paid annually by the Government. The solvency of the fund is guaranteed by the State. All moneys are paid to the Public Trustee, and the administration of the fund is vested in a Board, of which a Minister of the Crown is Chairman—four permanent members appointed by the Governor and six members elected, two by the Post and Telegraph Department, one by the Police Force, and three by all other Departments, the elected members holding office for three years. The Board at present consists, besides the Chairman, of the following members:—

Nominated—

Wm. C. Kensington, Esq., I.S.O.
J. W. Poynton, Esq.
J. H. Richardson, Esq.
F. Waldegrave, Esq.,

Elected—

H. A. R. Huggins, Esq.,
A. T. Markmann, Esq.,
for Post and Telegraph Department.

Elected—

J. W. Ellison, Esq., Inspector,
for Police Department.
George Allport, Esq.,
H. R. Spence, Esq.,
H. W. Bishop, Esq.,
for other Departments.

Secretary—

A. M. Smith.

CIVIL SERVICE GUARANTEE.

The Civil Service Act provides for the establishment of a system whereby officers of the Service guarantee the fidelity of each other. There are certain exemptions, including officers of both Houses of Parliament, officers of the Government Insurance Department, Official Assignees and their staffs, lighthouse-keepers and assistants, officers of the Railways Department, officers serving outside the limits of the Dominion, and any officer whose salary is less than £100 per annum.

In case of defalcation by an assurer the amount of such defalcation must be made good from the salaries of insurers by a deduction in proportion to the total yearly salary to the extent of thirty-nine-fortieths of the ascertained liability, the balance being a charge on the Consolidated Fund.

A Board of five members, of whom at least three must be assurers, is appointed by the Governor for the purpose of carrying out the provisions of the Act regarding the system. The following gentlemen constitute the present Board:—

F. G. B. Waldegrave, Under-Secretary for Justice.
D. Robertson, Secretary, Post and Telegraphs.
W. C. Kensington, I.S.O., Under-Secretary for Lands.
J. W. Poynton, Secretary to the Treasury.
W. B. Montgomery, Secretary for Customs.

Secretary to Board, A. M. Smith.

ECCLESIASTICAL.

THERE is no State Church in the Dominion, nor is State aid given to any form of religion. Government in the early days set aside certain lands as endowments for various religious bodies, but nothing of the kind has been done for many years past.

CHURCH OF THE PROVINCE OF NEW ZEALAND, COMMONLY CALLED
THE "CHURCH OF ENGLAND."

Bishops.

The Most Rev. Samuel Tarratt Nevill, D.D., Dunedin; consecrated 1871 (Primate).

The Right Rev. Owen Thomas Lloyd Crossley, M.A., Auckland; consecrated 1911.

The Right Rev. Alfred Walter Averill, M.A., Waiapu; consecrated 1910.

The Right Rev. Thomas Henry Sprott, M.A., Wellington; consecrated 1911.

The Right Rev. Charles Oliver Mules, D.D., Nelson; consecrated 1892.

The Right Rev. Churchill Julius, D.D., Christchurch; consecrated 1890.

The Right Rev. Cecil Wilson, D.D., Melanesia; consecrated 1894.

ROMAN CATHOLIC CHURCH.

Archbishop.

The Most Rev. Francis Redwood, S.M., D.D., Archbishop and Metropolitan, Wellington; consecrated 1874.

Bishops.

The Right Rev. Henry W. Cleary, D.D., Auckland; consecrated 1910.

The Right Rev. John Joseph Grimes, S.M., D.D., Christchurch; consecrated 1887.

The Right Rev. Michael Verdon, D.D., Dunedin; consecrated 1896.

ANNUAL MEETINGS AND OFFICERS.

The principal present heads or officers of the various churches, and the places and times of holding the annual or periodical assemblies or meetings, are as follow:—

Church of England.—For church purposes, the Dominion is divided into six dioceses—viz., Auckland, Waiapu, Wellington, Nelson, Christchurch, and Dunedin. The General Synod meets every third year in one or other of the dioceses. Representatives attend from each diocese, and also from the diocese of Melanesia. President, the Bishop of Dunedin, Primate. The Diocesan Synods meet once a year, under the presidency of the Bishop of the diocese.

Presbyterian Church of New Zealand.—The General Assembly will meet on the second Wednesday of November, 1911, in First Church, Dunedin. Moderator, the Rev. J. H. Mackenzie, Nelson; Senior Clerk, Rev. David Sidey, D.D., Napier; Junior Clerk, Rev. David Borrie, Dunedin; Treasurer, Rev. W. J. Comrie. Presbyterian Church Offices, Wellington; Theological Professors, Rev. Michael Watt, M.A., D.D., Dunedin, Rev. W. Hewitson, B.A., Dunedin, and Rev. John Dickie, M.A., Dunedin.

Roman Catholic Church.—The diocese of Wellington, established in 1848, was in 1887 created an archdiocese and the metropolitan see. There are three suffragan dioceses—Auckland, Christchurch, and Dunedin. A retreat is held annually in each of the four dioceses, at the end of which a synod is held, presided over by the bishop or archbishop, and at which all his clergy attend.

In January, 1899, the first Provincial Council of New Zealand was held in Wellington, under the presidency of the Metropolitan, and attended by all the suffragan bishops, and a number of priests elected specially in each diocese as representatives of the whole Catholic clergy in the Dominion. The decrees of this Council were approved by Rome in April, 1900, were published on 1st January, 1901, and are now binding in every diocese in the Dominion.

Methodist Church of Australasia in New Zealand.—The next annual New Zealand Conference meets on the last day of February, 1912, in the Pitt Street Church, Auckland. Each conference determines where the next one shall assemble. President (1911–12), Rev. G. W. J. Spence, Palmerston North, Secretary, Rev. S. Lawry, Armagh Street, Christchurch.

Primitive Methodist Connexion.—A conference takes place every January. The next is to be held at Christchurch, commencing 11th January, 1912. The Conference officials for the present year are: President, Rev. George H. Mann, Geraldine; Vice-President, Mr. G. H. Stiles, Esq., J.P., Foxton; Secretary, Rev. J. Southern, Granity, Westport; Hon. District Secretary, Mr. D. Goldie, Pitt Street, Auckland; Treasurer of Connectional Funds, Mr. Joseph Watkinson, Sherwood Road, Auckland.

Baptist Union of New Zealand.—President, Mr. R. Milligan, J.P., Oamaru; Vice-President, Rev. D. S. Mason, N.E. Valley; Secretary, Rev. R. S. Gray, Christchurch; Assistant Secretary, Rev. J. R. Archer, Napier; Treasurer, Mr. A. F. Carey, Christchurch; Mission Secretary, Rev. E. A. Kirwood, Mount Roskill, Auckland; Mission Treasurer, Mr. A. Hoby, Wellington. The Union comprises 50 churches, 34 preaching-stations, 5,165 members, and a constituency of 25,000. The denominational organ is the *New Zealand Baptist*; Editor, Mr. H. H. Driver, Dunedin. The Foreign Missionary Society, with an average income of £1,700, has a thoroughly equipped hospital, employs a doctor, a missionary, three zenana ladies, and 16 Native helpers. The sphere of operations is in North Tipperah, East Bengal.

Congregational Union of New Zealand.—The annual meetings are held during the month of February, at such place as may be decided on by vote of the Council. Chairman for 1911, Rev. A. E. Hunt, Timaru; Chairman-elect, Rev. R. Mitchell, Te Kuiti; Secretary, Rev. J. H. Mackenzie, Onehunga; Treasurer, Mr. W. H. Lyon, Auckland; Registrar, Mr. G. B. Gregory, Wellington; Head Office, Auckland. In 1912 the meeting of the Council will be held at Palmerston North. The Committee of the Union meets in Auckland on the second Tuesday of each month.

Hebrews.—Ministers: Rev. S. A. Goldstein, Auckland; Rev. H. van Staveren and Rev. C. Pitkowski, Wellington; Rev. I. Bernstein, Christchurch. Annual meetings of the general congregations are usually held at these places during the month of Elul (about the end of August).

DEPOTS FOR SHIPWRECKED MARINERS.

OUTLYING ISLANDS OF NEW ZEALAND.

MARINERS are informed that depots of provisions and clothing for castaways are established on the following islands:—

Kermadec Islands.—There are two depots, each a small iron shed, fitted with spouting and a tank to catch water, and containing a supply of clothing, biscuits, medicines, tools, &c. One is in $30^{\circ} 15' \text{ S.}, 178^{\circ} 31' \text{ W.}$, at Lava Cascade, about $1\frac{1}{2}$ cables south-eastward of the northern point of Macaulay Island; the other is in $30^{\circ} 35' \text{ S.}, 178^{\circ} 36' \text{ W.}$, on the southern side of Macdonald Cove (crater), on the N.W. side of Curtis Island.

Three Kings.—A provision depot has been established on the largest island. It is situated on the narrow neck at the head of N.W. and S.E. bays. The house is painted white, and is plainly visible from the latter bay. A finger-post is erected on the ridge overlooking the two bays, and is visible from the anchorage in each bay. A notice is nailed up inside the house giving instructions where to find water, and also how to attract the attention of the light-keepers at Cape Maria—namely, by making a fire on the hill to the west of the house—and that the light-keepers have been instructed to keep a constant look-out in that direction.

Snares Islands.—A depot is established in $48^{\circ} 03\frac{1}{4}' \text{ S.}, 166^{\circ} 33\frac{1}{4}' \text{ E.}$, in Boat Harbour, at the eastern end of N.E. Island.

Bounty Islands.—The depot is a hut at an elevation of 120 ft., visible from the northward, and situated in $47^{\circ} 43\frac{1}{4}' \text{ S.}, 179^{\circ} 0\frac{1}{2}' \text{ E.}$, southward of the western inlet of the principal island—the north-eastern—of the western group.

Antipodes Islands.—The depot is a hut at an elevation of 100 ft., visible from some distance north-eastward, and situated in $49^{\circ} 40'$

S., $178^{\circ} 50'$ E., 300 ft. from the landing-place, on the N.E. side of the large island, and half a mile westward of its east point.

Auckland Islands.—There are three depots on the principal island: one, a square wooden house, in $50^{\circ} 33\frac{1}{4}'$ S., $166^{\circ} 12'$ E., and a boat near the depot, on the S. side of Erebus Cove, Port Ross; on the E. side and at the northern end of the island; the second is in $50^{\circ} 44\frac{1}{2}'$ S., $166^{\circ} 8'$ E., at the head of Norman Inlet (wrongly named "Musgrave Inlet" on charts), and not at the inlet named Norman Inlet, two miles and a half northward; the third, and a boat for shipwrecked people, is in $50^{\circ} 50\frac{1}{2}'$ S., $166^{\circ} 1'$ E., in the western arm of Camp Cove, Carnley Harbour, at the S. end of the island. A lifeboat has been placed on Enderby Island, the north-eastern of the group; another at the N.W. end of Adams Island, the southern of the group; one on Rose Island, immediately S.W. of Enderby Island; and one on Disappointment Island.

Campbell Island.—The depot, indicated by a white staff and a boat, is in $52^{\circ} 33\frac{1}{2}'$ S., $169^{\circ} 6\frac{1}{2}'$ E., in Tucker Cove, at the head of S. or Perseverance Harbour, on the east side of the island.

Finger-posts to indicate the positions of the depots are erected on all these islands. The Government steamer visits the Kermadec and Three Kings Islands once a year; and the Snares, Bounty, Antipodes, Auckland, and Campbell Islands twice a year.

GRAVING-DOCKS AND PATENT SLIPS.

AUCKLAND DOCKS.

The Auckland docks are the property of the Auckland Harbour Board. The dimensions of the docks at Auckland are as follow:—

	Calliope Dock.	Auckland Dock.
Length over all	525 feet.	312 feet.
Length on floor	500 "	300 "
Breadth over all	110 "	65 "
Breadth on floor	40 "	42 "
Breadth at entrance	80 "	43 "
Depth of water on sill (at high water, ordinary spring tides)	33 "	13½ "

Alterations have been made to the lower altars of Calliope Dock which will enable vessels of 63 ft. beam to be docked without any difficulty. A complete equipment of modern machinery (to Admiralty specification) has been provided by the Board, including 80-ton sheer-legs.

The following is the scale of charges for the use of the Auckland and Calliope Graving-docks and appliances:—

AUCKLAND DOCK DUES.

(a.) For every entrance fee		£	s.	d.
		1	1	0
Vessels of—	For First Day or Part of First Day.	For each succeeding Day or Part of a Day.		
	£ s. d.	£	s.	d.
100 tons and under	7 10 0	5	10	0
101 tons to 200 tons	9 0 0	6	10	0
201 tons to 300 tons	10 10 0	7	10	0
301 tons to 400 tons	11 15 0	8	10	0
401 tons to 500 tons	13 0 0	9	10	0
501 tons to 600 tons	14 5 0	10	10	0
601 tons to 700 tons	15 10 0	11	10	0
701 tons to 800 tons	16 15 0	12	10	0
801 tons to 900 tons	18 0 0	13	10	0
901 tons to 1,000 tons	19 5 0	14	10	0
1,001 tons to 1,100 tons	20 10 0	15	10	0
1,101 tons to 1,200 tons	21 15 0	16	10	0
1,201 tons to 1,300 tons	23 0 0	17	10	0
1,301 tons to 1,400 tons	24 5 0	18	10	0
1,401 tons to 1,500 tons	25 10 0	19	10	0
1,501 tons to 1,600 tons	26 15 0	20	10	0
1,601 tons to 1,700 tons	28 0 0	21	10	0
1,701 tons to 1,800 tons	29 5 0	22	10	0
1,801 tons to 1,900 tons	30 10 0	23	10	0
1,901 tons to 2,000 tons	31 15 0	24	10	0
Over 2,000 tons	33 0 0	25	10	0

• Fifteen per cent. reduction on the above rates will be allowed when two or three vessels dock on the same tide and remain in dock the same number of hours, but such reduction will not be allowed if any of the Auckland Harbour Board's vessels are docked at the same time as another vessel.

For use of steam-kiln, 10s. per day.

Any master or person whose vessel occupies a dock or slip for more than fourteen days, including the day of entrance, if other vessels require the use of the dock, shall pay double-rates for every working-day which such vessel shall remain in the dock or upon such slip after the fourteen days.

CALLIOPE DOCK DUES.

(b.) For every entrance fee		£	s.	d.
		5	5	0
Vessels of—	For First Day or Part of First Day.	For each succeeding Day or Part of a Day.		
	£ s. d.	£	s.	d.
1,000 tons and under	30 0 0	20	0	0
1,001 tons to 1,500 tons	34 0 0	22	10	0
1,501 tons to 2,000 tons	38 0 0	25	0	0
2,001 tons to 2,500 tons	42 0 0	27	10	0
2,501 tons to 3,000 tons	46 0 0	30	0	0
3,001 tons to 4,000 tons	52 10 0	35	10	0
4,001 tons to 5,000 tons	59 0 0	40	0	0
5,001 tons to 6,000 tons	65 10 0	45	0	0
6,001 tons to 7,000 tons	72 0 0	50	0	0
7,001 tons to 8,000 tons	78 10 0	55	0	0
8,001 tons to 9,000 tons	85 0 0	60	0	0
9,001 tons to 10,000 tons	91 10 0	65	0	0
Over 10,000 tons	100 0 0	70	0	0

Fifteen per cent. reduction on the above rates will be allowed when two or three vessels dock on the same tide and remain in dock the same number of hours, but such reduction will not be allowed if any of the Auckland Harbour Board's vessels are docked at the same time as another vessel.

(c.) The dock dues shall be levied upon the gross register tonnage, and shall include and cover the cost of pumping, shoring, wedges, and blocking, and the cost of all labour connected with opening and closing the dock, and all incidental labour connected with the actual operation of docking a vessel. The entrance fee will be remitted upon payment of the dock dues levied.

During the year 1910, 134 vessels of various descriptions, with a total of 33,730 tons, made use of the Auckland Graving-dock, occupying it in all 188 days, for repairs or painting.

In Calliope Dock 18 vessels were docked with an aggregate tonnage of 47,327, and occupied the dock for 145 days.

Dock dues earned for the year amounted to £7,686.

Under arrangement. with the Admiralty, a complete plant of the most efficient and modern machinery has been provided at Calliope Dockyard. The workshops are erected, and all the machinery is placed in position. This plant includes 80-ton sheer-legs; trolley to carry 80 tons, and rails; 10-ton steam-crane at side of dock, engines, boilers, overhead travellers; planing, shaping, and slotting machines; radial drills, vertical drills, band saws for iron, punching and shearing machines, plate-bending rolls; 24 in. centre gantry lathe, 70 ft. bed; 9 in. and 12 in. gantry lathes, milling-machines, emery grinders, screwing-machines, ditto for pipes, horizontal boring-machines, Root's blower, smiths' forges (six), coppersmith's forge, levelling-slabs, steam-hammers, lead-furnace, wall-cranes, zinc-bath, plate-furnace, jib crane for foundry, circular-saw bench, band saw for wood, lathe for wood, general joiners' and carpenters' benches (four), kiln for steaming boards, Fox's trimmer, cupola to melt 5 tons of metal, countersinking-machine, pipe-bending machine, tools of various descriptions, moulders' bins, force-pumps for testing pipes, vice-benches, electric-light engines, dynamos (two), steam capstans, &c., and all other appliances and machinery required to render the plant adequate to repair any of His Majesty's ships upon the station or any merchant vessel visiting the port. The dock and machinery will be available for use, when not required for His Majesty's vessels, in effecting repairs to any merchant vessel requiring same. Electric lights have been provided for workshops, dock, and dockyard. The dockyard is connected by telephone with the central exchange. An abundant supply of the purest fresh water is available at Calliope Dock and Calliope Wharf.

WELLINGTON PATENT SLIP.

The Port of Wellington has a well-equipped patent slip at Evans Bay, on which vessels of 2,000 tons can be safely hauled up. This slip is the property of a private company, and is in no way connected with the Harbour Board. It is 1,070 ft. long, with a

cradle 260 ft. in length. There is a depth of 32 ft. at high water at the outer end of the slip. A dolphin and buoys are laid down for swinging ships in Evans Bay.

The company has convenient workshops, which contain machinery necessary for effecting all ordinary repairs to vessels using the slip.

During the year ended 31st March, 1911, 102 vessels of various sizes, were taken up on the slip for repairs, cleaning, painting, &c. The charges for taking vessels on the slip and launching them are 1s. per ton on the gross tonnage for the first full twenty-four hours, and 6d. per ton per day afterwards, unless by special agreement.

LYTTLETON DOCK AND PATENT SLIP.

The Graving-dock at Lyttelton, which is the property of the Harbour Board, is capable of docking men-of-war, or almost all of the large ocean steamers now running to the Dominion. Its general dimensions are: Length over all, 503 ft.; length on floor, 450 ft.; length inside caisson at a height of 4 ft. above the floor, 462 ft.; breadth over all, 82 ft.; breadth on floor, 46 ft.; breadth at entrance, 62 ft.; breadth where ship's bilge would be, on 6 ft. blocks, 55 ft.; available docking depth at this breadth, 17 ft.; depth of water on sill at high water, springs, 23 ft.

The scale of charges for the use of the dock and pumping machinery is as follows:—

	£	s.	d.
For all vessels up to 300 tons, for four days or less	..	20	0 0
" 301 to 400 tons, "	..	22	10 0
" 401 to 500 tons, "	..	25	0 0
" 501 to 600 tons, "	..	27	10 0
" 601 to 700 tons, "	..	30	0 0
" 701 to 800 tons, "	..	32	10 0
" 801 to 900 tons, "	..	35	0 0
" 901 to 1,000 tons, "	..	37	10 0
" 1,001 to 1,100 tons, "	..	40	0 0
" 1,101 to 1,200 tons, "	..	45	0 0
" 1,201 tons and upwards, "	..	50	0 0

After the fourth day in dock, the following rates are charged:—

For all vessels up to 500 tons	..	4d. per ton per day.
For all vessels of 501 tons to 1,000 tons	..	3d. "
For all vessels over 1,001 tons up to 2,000 tons	..	2½d. "
" 2,001 tons up to 3,000 tons	..	2½d. "
" 3,001 tons up to 4,000 tons	..	2½d. "
" 4,001 tons up to 5,000 tons	..	2d. "

Twenty per cent. reduction on the above rates is allowed when two or three vessels can arrange to dock on the same tide and remain in dock the same number of hours. Two vessels of 1,000 tons each can be docked at the same time. The 20-per-cent. rebate is not allowed if any of the Lyttelton Harbour Board's vessels are docked at the same time as another vessel. The twenty-four hours constituting the first day of docking commences from the time of the dock being pumped out.

Any vessel belonging to H.M. Navy or any colonial Government, or any commissioned ship belonging to any foreign nation, is admitted into the graving-dock without payment of the usual dock dues, but is charged only such sum as is necessary for the reimbursement of actual expenditure of stores, wages, and materials.

There are electric lights, one on each side of the graving-dock; and there are engineering works within a short distance of it, where repairs and heavy foundry-work can be undertaken.

The graving-dock and machinery cost £105,000. The interest and sinking fund on that sum, at $6\frac{1}{2}$ per cent., amounts to £6,357 per annum. Since its construction the dock dues for the twenty-seven years ended 31st December, 1910, amounted to £32,247, and the working-expenses to £19,158, leaving a balance for twenty-seven years ended 31st December, 1910, of £13,089.

During the year 1910 twenty-five vessels were docked, and the dock dues amounted to £3,723. For the twenty-seven years ending 1910, 603 vessels were docked, or an average of about twenty-one a year.

PATENT SLIP, LYTTTELTON.

Alongside the graving-dock is a patent slip, with a cradle 150 ft. in length, suitable for vessels of 300 tons. It belongs to the Harbour Board.

The following is the scale of charges:—

Up to 75 tons gross register, £4 for five days, and 10s. per day after the fifth day.
Over 75 tons and up to 150 tons gross register, £6 for five days, and 15s. per day after fifth day.

Over 150 tons and up to 250 tons gross register, £8 for five days, and 20s. per day after fifth day.

Over 250 tons gross register, £10 for five days, and 20s. per day after fifth day.

A "day" to mean between sunrise and sunset.

The above rates cover the cost of all labour connected with hauling up and launching (the crew of the vessel to give their assistance as may be required), and the cost of blocking a vessel and shifting the blocks after hauling up.

OTAGO GRAVING-DOCKS.

The docks at Port Chalmers are now vested in the Otago Harbour Board. Vessels of large size can be taken in the Otago Dock, as the following measurements will show:—

Length over all	..	..	..	..	520 feet.
Length on the floor	..	..	..	..	500 "
Breadth where ship's bilge would be	..	..	..	..	72 "
Breadth at dock-gates	..	..	..	..	70 "
Depth on sill, H.W.O.S.	..	..	..	..	21 "

Dimensions of Port Chalmers Dock.

Length on floor	..	..	..	..	300 feet.
Width, bottom of dock	..	..	..	..	41 "
Width, top of dock	..	..	..	..	68 "
Width at ship's bilge	..	..	..	..	43 "
Width at dock-gates	..	..	..	..	50 "
Depth on sill, H.W.O.S.	..	..	..	..	19 ft. 6 in.
Depth on sill, H.W.O.T.	..	..	..	..	17 ft. 6 in.

Vessels up to 335 feet long can dock in the Port Chalmers Dock.

Connected with the Otago Dock are a large machine-shop, steam-hammer, and forge, with all the appliances necessary for performing any work that may be required by vessels visiting the port. An 80-ton shear-legs has also been erected for heavy lifts.

There is also a patent slip, used for taking up small vessels.

All vessels using the Otago Graving-dock are liable for dock dues according to the following scale (unless under special contract):—

	£	s.	d.
For all vessels up to 300 tons, for four days or less	..	20	0 0
" 301 to 400 tons, "	..	22	10 0
" 401 to 500 tons, "	..	25	0 0
" 501 to 600 tons, "	..	27	10 0
" 601 to 700 tons, "	..	30	0 0
" 701 to 800 tons, "	..	32	10 0
" 801 to 900 tons, "	..	35	0 0
" 901 to 1,000 tons, "	..	37	10 0
" 1,001 to 1,100 tons, "	..	40	0 0
" 1,101 to 1,200 tons, "	..	45	0 0
" 1,201 tons and upwards, "	..	50	0 0
After the fourth day in dock the following rates are charged:—			
For all vessels up to 500 tons	..	4d.	per ton per day.
For all vessels of 501 tons to 1,000 tons	..	3d.	"
For all vessels over 1,001 tons up to 2,000 tons	..	2½d.	"
" 2,001 tons up to 3,000 tons	..	2½d.	"
" 3,001 tons up to 4,000 tons	..	2½d.	"
" 4,001 tons up to 5,000 tons	..	2d.	"

Twenty per cent. reduction on the above rates is allowed when two or three vessels can arrange to dock on the same tide and remain in dock the same number of hours. Two vessels of 1,000 tons each can be docked at the same time. The 20 per-cent. rebate is not allowed if any of the Otago Harbour Board's vessels are docked at the same time as another vessel. The twenty-four hours constituting the first day of docking commences from the time of the dock being pumped out.

Any vessel belonging to H.M. Navy or any colonial Government, or any commissioned ship belonging to any foreign nation, is admitted into the graving-dock without payment of the usual dock dues, but is charged only such sum as is necessary for the reimbursement of actual expenditure of stores, wages, and materials.

HARBOURS.

PILOTAGE, PORT CHARGES, ETC.

PILOTAGE, port charges, berthage charges, &c., at eighteen of the principal harbours in New Zealand, as on the 1st January, 1911 (compiled by Mr. C. Hood Williams, Secretary to the Lyttelton Harbour Board):—

AUCKLAND.

Pilotage (not compulsory): Sailing-vessels, inwards and outwards, 3d. per ton each way.

Steamers, inwards and outwards, 2d. per ton each way when services of pilot are taken.

The minimum pilotage fee payable in respect of any vessel shall be £2 10s.

Pilotage includes the removal fee to or from the berth at 1d. per ton. In the case of any vessel, the registered tonnage of which exceeds 8,000 tons, no pilotage rates shall be payable in respect of such excess.

Port charges: 3s. per ton half-yearly (on all vessels over 15 tons) in one payment. Vessels arriving for coal, stores, water, or for receiving or landing mails, which do not come to any wharf or receive or discharge cargo within the port, are exempt from port charges. In the case of any vessel the registered tonnage of which exceeds 8,000 tons, no port charges shall be payable in respect of such excess.

Harbourmaster's fees: For every vessel of 120 tons and under, 10s.; for every vessel over 120 tons up to 8,000 tons, 1d. per ton; vessels over 8,000 tons, $\frac{1}{2}$ d. per ton for every ton in excess of 8,000 tons. Vessels paying pilotage are exempt.

Exemption berthage certificates are given to competent masters in the coastal and intercolonial trades upon a payment of £2 2s., but not to those in foreign trade.

Berthage: Every person who shall use any wharf with any vessel shall pay for the use thereof—Licensed ferry steamers, 10s. to £2 per month; other vessels under 20 tons, 6d. and 1s. per day, not exceeding 10s. per quarter. For every vessel not included in the above, $\frac{1}{4}$ d. per ton per day. Outside berths, $\frac{1}{2}$ d. per ton per day.

GISBORNE.

Pilotage (not compulsory): To roadstead—Sailing-vessels, first 100 tons, 6d. per ton; every ton over 100 tons, 2d. per ton; steamers, first 100 tons, 3d. per ton; every ton over 100 tons, 1d. per ton. Into Turanganui River: Sailing vessels, 4d. per ton; steamers, 3d. per ton. Outward pilotage, half-rates.

Port charges: Vessels plying within port only, 3d. per ton quarterly in advance. Vessels not plying within the port only, 2d. per ton on arrival, but not to exceed 1s. per ton in any half-year.

Ocean-going vessels (not being "colonial trading" or coasting vessels) returning to port within one month from date of first arrival are exempt from port charges for second or subsequent arrivals within calendar month.

Harbourmaster's fees: 5s. per vessel of less than 60 tons. Vessels licensed as lighters are exempt. 1d. per ton, sailing-vessels 60 tons and upwards; 10s. per vessel, steamers of 60 and under 120 tons.

To roadstead only: 1d. per ton, ocean-going steamers, (not being "colonial trading" vessels or coastal vessels), but not to exceed 6d. per ton in any half-year; all other steamers, 120 tons and upwards, $\frac{1}{2}$ d. per ton on arrival, but not to exceed 3d. in any half-year.

Into Turanganui River: 1d. per ton on arrival, steamers of 120 tons and upwards.

Berthage rate: Lighters carrying cargo, 2s. 6d. per trip. Lighters also charged license 1s. per ton register per annum.

River-improvement rate: Vessels entering Turanganui River, 1d. per ton, occupying berths.

THAMES.

Pilotage (compulsory): In and out—Sailing-vessels up to 100 tons, 6d. per ton, and 2d. for each ton over 100 tons; steamers up to 100 tons, 6d. per ton, and 4d. per ton for each additional ton.

Port charges: Regular traders, 2d. per ton per quarter; other vessels, 2d. per ton each trip, not to exceed 1s. 3d. per ton in half-year.

Harbourmaster's fees: Nil.

Berthage: 20 tons and under, 10s. per ton per quarter; over 20 tons, 6d. per ton per quarter, or 2s. 6d. first 20 tons per day and $\frac{1}{4}$ d. each additional ton.

Warps and fenders: Nil.

NEW PLYMOUTH.

Pilotage (compulsory), charged both inwards and outwards: Intercolonial or coasting—Sailing-vessels, 3d. per ton; steamers, $1\frac{1}{2}$ d. per ton; foreign sailing-vessel or steamer, $\frac{1}{4}$ d. per ton.

Port charges: Intercolonial, 4d. per ton, payable half-yearly; foreign, $\frac{1}{2}$ d. per ton on arrival in roadstead.

Harbourmaster's fees: Nil.

Berthage rate: $3\frac{1}{2}$ d. per ton on all cargo landed, shipped, or transhipped outwards; on registered tonnage also $\frac{1}{2}$ d. per ton.

Warps: 1d. per ton register for first 100 tons; $\frac{1}{2}$ d. per ton for excess.

Fenders: 1s. per day or part of day.

Water (minimum 3s.): 5s. per 1,000 gallons.

WAITARA.

Pilotage : From signal-staff, $\frac{1}{2}$ d. per register ton each way, in and out. Ocean-going vessels $\frac{1}{2}$ d. per register ton (one way only).

Port charges : Steamers and sailing-vessels, 3d. per ton quarterly, payable first trip in each quarter ; ocean-going vessels, $\frac{1}{2}$ d. per register ton, payable each trip.

Harbourmaster's fees : Nil.

Berthage : Steamers 2d. per ton and sailing-vessels 3d. per ton every trip.

Warps and fenders : Nil.

PATEA.

Pilotage (in and out) : 1d. per ton register.

Port charges : 3d. per ton every three months. Light dues, $\frac{1}{2}$ d. per ton.

Harbourmaster's fees : Nil.

Berthage : 6d. per ton on cargo, as per manifest.

Warps and fenders : Nil.

Water : 2s. 6d. per 1,000 gallons.

WAIROA.

Pilotage (compulsory) : 6d. per register ton.

Port charges : 3d. per ton per quarter.

Harbourmaster's fees : Nil.

Berthage, warps, and fenders : Nil.

NAPIER.

Pilotage (not compulsory) : Into Inner Harbour—Sailing-vessels, 4d. per ton ; steamers, 3d. per ton. Into breakwater, harbour, or roadstead—First 100 tons : Sailing-vessels, 6d. per ton ; steamers, 3d. per ton. Every ton over 100 tons : Sailing-vessels, 2d. per ton ; steamers, 1d. per ton. Outward pilotage, half-rates.

Port charges : 6d. per ton quarterly in advance, vessels plying within port only ; 2d. per ton on arrival of vessels not plying within port, but not to exceed 1s. per ton in any half-year. Ocean-going vessels (not being "colonial trading" or coasting vessels) returning to port within thirty days from date of first arrival are exempt from port charges for second or subsequent arrivals within calendar month.

Harbourmaster's fees : 5s. per vessel of less than 60 tons. 1d. per ton, sailing-vessels 60 tons and upwards ; 10s. per vessel, steamers of 60 tons and under 120 tons ; 1d. per ton, steamers of 120 tons and upwards. Vessels paying for pilotage service inwards do not pay Harbourmaster's fees.

Harbour-improvement rate : 3d. per ton on cargo landed, shipped, or transhipped (weight or measurement at option of Board) ; 1s. each horse or large cattle shipped or transhipped ; $\frac{1}{2}$ d. each sheep or small animal shipped or transhipped.

Hawsers and moorings : Vessels at wharf in Breakwater Harbour, $\frac{1}{2}$ d. per ton per day, or part of a day, on registered tonnage. Vessels moored to buoys within Breakwater Harbour, $\frac{1}{2}$ d. per ton per day or part of a day.

Fenders : Vessels at wharves in Breakwater Harbour—5s. per day, vessels under 500 tons ; 7s. per day, vessels of 500 tons and under 1,000 tons ; 10s. per day ; vessels of 1,000 tons and under 1,500 tons ; 15s. per day, vessels of 1,500 tons and under 2,000 tons ; £1 per day, vessels of 2,000 tons, and under 3,000 tons ; 5s. for every 1,000 tons over 3,000 tons.

WANGANUI.

Pilotage : All vessels when piloted by signals from the staff only, 1d. per ton register. River pilotage, to be charged for any assistance rendered by the pilot or any of his crew inside the bar, 2d. per ton. When a pilot boards and conducts a vessel outside the bar, 3d. per ton. Steamers engaged in tendering ocean steamers at anchor in the roadstead charged half pilotage rates.

Port charges: Vessels of 500 tons and up to 8,000 tons register, $\frac{1}{2}$ d. per ton. Not to exceed 3d. per ton in any half-year. Vessels paying pilotage exempt. Ocean-going vessels (not being "colonial-trading" or "coastal") returning to the port within one month of first arrival exempt as regards second or subsequent arrivals.

Harbourmaster's fees: Nil.

Berthage: For every steamer using any wharf, being berthed alongside, and whether discharging or loading cargo or not, 2d. per ton on gross register for first day of eight working-hours, and 1d. for every succeeding day of eight working-hours. For every sailing-vessel the charge to be 2d. for first day of eight working-hours, and $\frac{1}{2}$ d. for every succeeding day of eight working-hours, not exceeding five days. For every vessel occupying a berth outside another vessel, and loading or discharging cargo, $\frac{1}{2}$ d. per ton on gross register per day of eight working-hours whilst loading or discharging. Ships' dues on vessels detained in port by stress of weather will not be charged after the third day.

WELLINGTON.

Pilotage (optional): Sailing-vessels inwards, 4d. per ton; sailing-vessels outwards, 3d. per ton; steamers inwards, 3d. per ton; steamers outwards, 2d. per ton. Pilotage includes the removal of a vessel to or from a wharf.

Port charges: 2d. per ton on arrival; not exceeding 6d. in any half-year. Steamers arriving for coal, stores, water, or for receiving or landing mails or passengers and their luggage which do not come to any wharf or receive or discharge cargo within the port, are exempt from port charges.

Harbourmaster's or berthing fee on vessels of 120 tons and upwards, 1d. per ton; under 120 tons, 10s. Vessels paying pilotage are exempt. Exemption berthage certificates are given to competent masters in the coastal and inter-colonial trades, but not to those in foreign trade.

Berthage or lay days: Vessels over 100 tons net register, $\frac{1}{2}$ d. per ton net register per day or part of a day (day counted from midnight to midnight). Vessels berthing after working-hours, and only landing passengers and luggage, not charged for that day. Vessels leaving wharf after midnight and prior to working-hours, and only on such day taking on board passengers and luggage, not charged for such day. Vessels under 100 tons net register, 2s. per day or part of a day. Vessels not working cargo after noon on Saturdays pay half-rates for such Saturday. No charge for Sundays or holidays.

Harbour-improvement rate: The charge of 6d. per ton shall be made to and payable by ships to the Board, as a harbour-improvement rate, on all goods landed on the wharves or landing-places under the control of the Board, except on ballast and coal, and except on such goods as are the products of the Dominion of New Zealand and are landed for the purpose of transhipment to vessels to be carried out of the Dominion: Provided that for the purposes of this by-law the following measurements shall be taken: Empties, half-tonnage; wool, five bales to the ton; great cattle, each one ton; small cattle, twelve to the ton; timber, 500 ft. superficial measurement to the ton; bricks, slates, and tiles, 500 to the ton; carts and carriages, each two tons; loose hides, twenty-five to the ton.

Harbour-improvement rate on coal: If landed on wharves, 1d. per ton; if transhipped over side at wharves, 1d. per ton, but so that no one shipment of coal pays the 1d. more than once; if transhipped over side in stream, free.

Ballast: Free.

NELSON.

Pilotage (compulsory): Steamers, inwards and outwards, $1\frac{1}{2}$ d. per registered ton; sailing-vessels, inwards and outwards, 6d. per ton. Minimum pilotage each way (in all cases), £1 10s.

British and foreign-going vessels to pay (in addition to pilotage) the following, on first arrival: Half-yearly—viz., between January and June, and July and December—per ton register, $3\frac{1}{2}$ d. (this payment to include the services of a tug when necessary).

Port charges: Vessels not paying pilotage, to pay the following, upon first arrival: Half-yearly, 1s. per ton.
 Harbour lights: Vessels not paying pilotage, over 60 tons register, 2d. per ton; under 60 tons register, 1d. per ton, on each arrival.
 Harbourmaster's fees: 120 tons and upwards, 1d. per ton register; less than 120 tons, 10s. for each removal of any steamer or sailing-vessel within the harbour.
 Berthage, fenders, and warps: Nil.

WESTPORT.

Pilotage (compulsory): All vessels up to 100 tons, free. Any vessel, steamer, or sailer above 100 tons register, 1d. per ton each way, in and out. One way only, half-rates.
 Port charges: Receiving and discharging ships' ballast, 1s. per ton; minimum charge, 20s.; 1d. per ton for use of shoot.
 Harbourmaster's fees: Nil.
 Berthage: Use of wharf, for every vessel up to 1,400 tons lying at wharf, 1d. per ton net register per trip; for every vessel over 1,400 tons lying at a wharf, 2d. per ton net register per trip; minimum charge, 5s.
 Towage (both ways, in and out): Sailing-vessels, minimum charge, £7 10s.; maximum charge, £37 10s. Vessels 200 tons and upwards, 9d. per ton register. Steamers: minimum charge, £12 10s. maximum charge, £40. Vessels 1,000 tons and upwards, 3d. per ton register. Any vessel using the tug one way only, either in or out, half-rates, and vessels arriving for "bunker" coal—i.e., coal to be used in the ship on her voyage and for no other purpose—half-rates. Declaration to be made to this effect.

GREYMOUTH.

Pilotage (not compulsory): Signal-station. For sailing-vessels, 6d. per ton; for steamers, 4d. per ton, each way.
 Port charges: Discharging ships' ballast, 6d. per ton.
 Harbourmaster's fees: Nil.
 Berthage: 1d. per ton net register for the first four days. For each additional day: Steamers, per ton register, $\frac{1}{2}$ d.; sailing-vessels, per ton register, $\frac{1}{2}$ d. Day counted from midnight to midnight. No charge for Sundays or statutory holidays, provided no cargo is landed or shipped.
 Warps: £1 per trip.

LYTELTON.

Pilotage (compulsory): Inwards and outwards—Sailing-vessels $3\frac{1}{2}$ d. per ton; steamers $2\frac{1}{2}$ d. per ton. Foreign-going steamers and sailing-vessels free on second call on same voyage.
 Port charges: 2d. per ton quarterly, in advance, for vessels of 100 tons and upwards plying within the port or employed in coasting only, not to exceed 6d. per ton in any half-year; 2d. per ton for vessels of 100 tons and upwards not plying within the port or not solely employed in coasting, not to exceed 6d. per ton in any half-year. For exemption from pilotage and harbour fees, see sections 116, 117, and 118 of the Harbours Act, 1908.
 Harbourmaster's fees: Nil.
 Berthing charges: On all vessels of 25 tons register and upwards $\frac{1}{2}$ d. per ton per day, with a maximum charge of three days.
 Warps (21 in. coir hawsers): £1 per warp for use during a vessel's stay in port, not exceeding six months.
 Fenders (soft wood): 10s. for first day, and 5s. per day after. 10s. for use of each hardwood fender.

TIMARU.

Pilotage (compulsory): Sailing-vessels, 3d. per ton inwards and outwards; when tug used, 2d. per ton: steamers, 2d. per ton inwards and outwards. Foreign and intercolonial steamers under 3,500 cargo tons, working 800 tons cargo or less, only one pilotage fee; 3,500 tons or over, working 1,000 tons cargo or less,

one pilotage fee only. Foreign-going steamer or sailing-vessel calling more than once during same voyage before leaving New Zealand, one inward and outward rate only (subject to above exemptions).

Port charges: Coasters, $1\frac{1}{2}$ d. per ton each trip; sailing-vessels, not coasters, 3d. per ton each trip; steam-vessels, not coasters, 6d. per ton on cargo worked. Intercolonial steamers coming direct or coastwise $1\frac{1}{2}$ d. per ton register, or 6d. per ton on cargo landed and shipped, whichever rate may be the lesser. In all cases not to exceed 1s. 3d. per ton in any half-year, dating from the 1st days of January and July in each year.

Harbourmaster's fees: 1d. per ton each service; vessels less than 120 tons, 10s.; steamers of 1,000 tons or over, which have loaded wholly in New Zealand or Australian ports, working 500 tons of cargo or less, only one Harbourmaster's fee. This fee is charged to all vessels or steamers not paying pilotage.

Berthage: 3d. per ton on all cargo landed or shipped. Transhipments, half-rates.

Hawsers and moorings: Vessels at wharves, $\frac{1}{2}$ d. per ton register for first three days; subsequent days, $\frac{1}{4}$ d. per ton. Vessels at buoys, under 800 tons register, $\frac{3}{4}$ d. per ton; over 800 tons, $1\frac{1}{8}$ d. per ton.

Fenders: Sailing-vessels under 500 tons register, 2s. per day; under 1,000 tons, 3s. per day; over 1,000 tons, 4s. per day. Steamers under 1,000 tons register, 4s. per day; under 1,500 tons, 10s. per day; under 2,000 tons, 15s. per day; over 2,000 tons, £1 per day, after three days half-charges. Foreign-going vessels detained in the port sixty days, half-rates thereafter. A day is calculated as twenty-four hours from the time of berthing or mooring. Maximum charge for hawsers and fenders, per visit, £15.

Towage: Vessels under 100 tons register, £1 10s.; every 50 tons or fraction of 50 tons up to 500 tons, 10s.; over 500 tons, 5s. Distances beyond three miles, 1d. per ton register per mile.

Removals: Vessels under 150 tons, £1; every additional 50 tons or fraction of 50 tons, half sea-towage rates. Coal-hulk, £1 each way. When tug used for other services, but not in nature of salvage, £5 per hour. For foreign-going vessels detained in port 60 days, half-rates thereafter. When tug's hawser used, 1d. per ton register charged for each occasion.

Use of Board's oil-launch: Passengers—Special trip, £2; when Harbourmaster is going off to vessel, 2s. 6d. per passenger. Agents and masters—Special trip, £1; when agent or master directly connected with particular vessel to which the Harbourmaster is going off, free. Health Officer—Special trip, £2; when the Harbourmaster is going off to vessel, £1.

OAMARU.

Tonnage rate: On cargo, inwards or outwards—Coal, merchandise, stone, produce, and timber, 8d. per ton; wool, 2s. per ton; frozen sheep, 1d. per carcass; frozen lamb, 1d. per carcass; rabbits and hares, 3s. per ton, gross weight; all other frozen goods, 3s. per ton, gross dead-weight; live-stock, 1s. 8d. per ton. These charges are in lieu of the usual port dues, pilotage, and berthage dues. Cargo is computed as follows for tonnage rates and cranage: Timber (native), 480 ft., super., to the ton; timber (ironbark), 320 ft., super., to the ton; other hard wood, 380 ft., super., to the ton; posts and rails, 50 to the ton; palings, 320 to the ton; Oamaru stone, 22 cubic feet to the ton, or as per railway weight; wool, 4 bales to the ton; live sheep, 20 to the ton; horses, 2 tons each; cattle, 2 tons each; yearlings, half-rates; pigs, 10 to the ton; light carriages, two-wheeled, 1 ton each; light carriages, four-wheeled, 2 tons each. In computing the tonnage-rate all goods may be charged upon the dead weight or measurement, at the option of the Board.

Warps: $\frac{1}{2}$ d. per ton per day for seven days; $\frac{1}{4}$ d. per ton per day thereafter. In the event of any vessel remaining at any wharf for a period exceeding six weeks, the charge for warps will thereafter be reduced to $\frac{1}{8}$ d. per ton register of such vessel for each day or part of a day that she may occupy a berth at the wharf.

OTAGO (DUNEDIN).

Pilotage (compulsory): Inwards and outwards—Sailing-vessels without tug, 6d. per ton; with tug, 4d. per ton: steamers, 4d. per ton. Foreign steamers calling twice on one voyage only charged once. All vessels holding exemption certificates, one annual pilotage. For every vessel under steam carrying an exempt pilot and employing a Board's pilot the charge shall be $\frac{1}{2}$ d. per ton for the Upper Harbour.

Port charges: 2d. per ton, but not to exceed 6d. per ton half-yearly, all vessels.

Harbourmaster's fees: Vessels less than 120 tons, 10s.; over 120 tons, 1d. per ton.

Berthage: Every steam or sailing vessel occupying a berth at the Board's wharves shall, subject to the following exemption, pay the following berthage rate: One halfpenny per ton net register per day or part of a day, provided that the maximum amount chargeable shall not exceed £15, and that the minimum amount shall be 1s. per day or part of a day. Any small boat or yacht using or berthing at any of the Board's wharves, jetties, or landing stages, and not holding a license under the by-laws, shall pay the sum of 1s. per day or part of a day, or in lieu thereof the Board will accept a yearly berthage fee of 5s., paid in advance, provided that nothing contained herein shall render any dingey or small boat belonging to licensed vessels, or vessels berthed at the Board's wharves and paying a berthage rate, subject to any berthage charge.

Towage: When assistance is given to steam-vessels under steam, one-fourth usual towage, not exceeding £5 for Upper Harbour and £7 for Lower Harbour.

Extracts from by-laws: The maximum charges on any one vessel for port charges, pilotage and harbourmaster's fees, both inwards and outwards, shall not exceed £180 on any one visit; and in the case of a foreign steamer calling twice at the port on one voyage shall not exceed £200. Minimum charge: On application of the master or agent of any foreign-going steamer visiting the port, the ordinary charges for pilotage and port charges shall be suspended, and a charge of 5s. per ton on cargo as per ships manifest discharged, and 10s. per ton on cargo loaded, shall be substituted therefor, but there shall be a minimum charge of £50. Any payments made under this by-law shall not be deemed to be an inward and outward pilotage under section (d) of By-law No. 79.

BLUFF.

Pilotage (compulsory): Steamers, inwards and outwards, $2\frac{1}{2}$ d. per registered ton: sailing-vessels, $\frac{1}{2}$ d. inwards and outwards if tug not employed; $2\frac{1}{2}$ d. per registered ton inwards and outwards if tug employed. Sailing-vessels in ballast, $2\frac{1}{2}$ d. per registered ton inwards and outwards. Steamers, in and out, 5d. per registered ton, payable yearly; sailing-vessels, in and out, 9d. per registered ton, payable yearly. On application by master or agent of foreign going steamers ordinary charges for pilotage, port charges, and berthage may be suspended, and a charge of 5s. per ton for inward cargo and 10s. per ton for outward cargo may be substituted therefor, with a minimum charge of £50.

Port charges: On all vessels, per trip, 2d. per registered ton, but no vessel shall be required to pay more than 6d. per registered ton in any six months from date of entry.

Harbourmaster's fees: Nil.

Berthage: Steamers, 2d. per ton net register for the first day, and 1d. per ton per week or part of a week thereafter. Sailing-vessels and hulks of over 50 tons register, 1d. per ton net register per week for the first four weeks, and $\frac{1}{2}$ d. per ton per week thereafter.

Towage assistance to steamers using their own motive power: Over 3,000 tons, £5; over 2,000 tons, £4; under 2,000 tons, £3.

Steamers calling more than once on same voyage only charged one inward and outward pilotage.

Maximum charge for harbour dues, £180 in any one visit, including ten days' berthage.

WHARFAGE RATES.

Wharfage rates at eighteen of the principal harbours in New Zealand, as on 1st January, 1911 (compiled by Mr. C. Hood Williams, Secretary to the Lyttelton Harbour Board).

AUCKLAND.

General Merchandise.—2s. per ton imports; 1s. per ton exports.

Transshipments: Half-rates when declared before landing.

Grain and Agricultural Produce.—1s. 6d. per ton landed; 1s. per ton shipped.

Transshipments: Half-rates when declared before landing.

Frozen Meat, Butter, &c.—1s. 6d. per ton landed; 1s. per ton shipped.

Transshipments: Half-rates when declared.

Wool.—6d. per bale, shipped or landed.

Transshipments: If landed, dumped, and reshipped, 3d. per bale.

Coal.—1s. 3d. per ton landed; 6d. per ton shipped.

Transshipments: Half-rates when declared. Shipped or discharged over side for steamer's use, free.

Timber.—Sawn, 2s. per 1,000 ft. landed; 1s. per 1,000 ft. shipped. Baulk or round (less 12½ per cent.), 1s. per 1,000 ft. landed, 6d. per 1,000 ft. shipped.

Transshipments: Half-rates when declared.

Passengers' luggage under half a ton, goods carried by hand by passengers and single packages under 5 ft. measurement, free.

GISBORNE.

General Merchandise.—Imports: General, 5s. per ton; kerosene, sugar, and wire, 5s. per ton; wine and spirits, 7s. 6d. per ton. Exports: General, 2s. 6d. per ton. If paid inward, free.

Transshipments: Half-rates.

Grain and Agricultural Produce.—Imports: Grain, 5s. per ton; grass-seed, 5s. per ton; maize, 5s. per ton; potatoes (12 sacks), 5s. per ton; oats (12 sacks), 5s. per ton; chaff (20 sacks), 5s. per ton; flour, 5s. per ton; bran and pollard, 2s. 6d. per ton. Exports: Grain, 1s. per ton; grass-seed, 2s. per ton; maize, 1s. per ton; potatoes (12 sacks), 1s. per ton; chaff (20 sacks), 1s. per ton.

Transshipments: Half-rates.

Frozen Meat, Butter, &c.—Exports: Carcasses mutton, 1½d. each; carcasses lamb, not exceeding 36 lb, ¾d.; beef, tallow, and other meat products, 2s. 6d. per ton; butter, 2s. 6d. per ton; hides, every 40 or 10 sacks, 2s. 6d. per ton; sheep-skins, per bale or every 60, 1s. per ton.

Wool.—1s. per bale, export.

Transshipments: 3d. per bale; 1s. per bale if landed at all.

Coal.—2s. per ton; bunker coal not landed, 6d. per ton; coke (20 sacks), 2s. per ton.

Timber.—4s. per 1,000 ft. super., imports; 1s. per 1,000 ft. super., exports.

THAMES.

General Merchandise.—1s. 6d. per ton, imports or exports, without labour.

Transshipments: Free, if inward wharfage has been paid; half-rates otherwise.

Grain and Agricultural Produce.—1s. 6d. per ton, imports or exports, without labour.

Transshipments: Free, if inward wharfage has been paid; half-rates otherwise.

Frozen Meat, Butter, &c.—None shipped.

Transshipments: Half-rates.

Wool.—1s. 6d. per ton.

Transshipments: Half-rates.

Coal.—1s. 6d. per ton, without labour.

Transshipments: Free, if inward wharfage has been paid; half-rates otherwise.

Timber.—1s. per 1,000 ft. sawn timber; 6d. per 1,000 shingles; 2s. per 100 props; 1s. 6d. per 100 slabs; 4s. per 100 sleepers; 2s. 6d. per 100 posts or rails; 2s. 6d. per 1,000 palings; 6d. per ton firewood.

NEW PLYMOUTH.

General Merchandise.—2s. per ton.

Transshipments: 1s. 6d. per ton.

Grain and Agricultural Produce.—2s. per ton; grass-seed, 2s. per 20 sacks.

Transshipments: 1s. 6d. per ton.

Frozen Meat, Butter, &c.—2s. per ton.

Transshipments: 1s. 6d. per ton.

Wool.—6d. per bale; five bales of 4 cwt., 2s. per ton; three bales of over 4 cwt. 2s. per ton.

Transshipments: Three-quarter rates.

Coal.—2s. per ton; brown coal, 1s. 9d.: with labour.

Transshipments: Three-quarter rates, with labour.

Timber.—480 ft. per ton, 2s.; hard wood, 320 ft. per ton (rough or sawn), 2s.: with labour.

Transshipments: Three-quarter rates.

WAITARA.

General Merchandise.—Inwards, 2s. per ton, including forty-eight hours' storage; outwards, 2s. per ton, including ten days' storage. Labour provided by the Board.

Transshipments: Half-rates.

Grain and Agricultural Produce.—Imports, 2s. per ton; grass-seed, 2s. per 20 sacks. Labour provided. Exports, in not less than 3-ton lots, 1s. per ton.

Transshipments: Half-rates.

Frozen Meat, Butter, &c.—1s. per ton weight, without labour.

Transshipments: Half-rates, without labour.

Wool.—Dumped, 4½d. per bale; undumped, 6d. per bale.

Transshipments: Half-rates.

Coal.—Imports, 1s. 6d. per ton, without labour; brown coal, 1s. per ton, without labour.

Transshipments: Half-rates.

Timber.—Under 5,000 ft., 3d. per 100 ft.; over 5,000 ft., 2d. per 100 ft.: without labour. Exported white-pine, if over 5,000 ft., 1½d. per 100 ft.: without labour.

Transshipments: Half-rates.

PATEA.

General Merchandise.—2s. per ton, imports or exports (produce shipped direct from South ports, 1s. 6d.).

Transshipments: 1s. per ton.

Grain and Agricultural Produce.—2s. per ton of 10 sacks grain, 20 sacks cocks-foot grass-seed, 20 sacks bran, 40 sacks chaff, 16 sacks pollard or rye-grass. Potatoes, export, 1s. per ton; import, 2s. per ton.

Frozen Meat, Butter, &c.—Butter and cheese 1s. per ton, without labour, from grading-wharf; otherwise, 2s., with labour. Frozen meat, 1s. 6d. per ton; cas-d meats, 1s. per ton, without labour.

Wool.—6d. per bale, including storage.

Hides.—3d. per dozen.

Coal.—1s. per ton, without labour.

Timber.—4d. per 100 ft.; labour extra.

WAIROA.

General Merchandise.—2s. per ton, imports and exports.

Transshipments: Returned empties, free.

Grain and Agricultural Produce.—1s. 6d. per ton, imports and exports.

Butter.—2s. per ton.

Wool.—9d. per bale, imports and exports.

Coal.—1s. per ton.

Timber.—2½d. per 100 ft. Exports, fruit, free. Returned empties, free.

NAPIER.

General Merchandise.—2s. 6d. per ton imports, 1s. 3d. per ton exports, according to measurement or weight. If labour supplied, add on 6d. imports, and 6d. exports. Ballast, inwards, 1s. per ton; outwards, 1s. per ton. Empties, 1s. 9d. per ton imports; 10d. per ton exports.

Transshipments: Quarter import rates, Outer Harbour; half import rates, Inner or Breakwater Harbours.

Grain and Agricultural Produce.—2s. 6d. imports, 1s. 3d. exports, according to measurement or weight. If labour supplied, add on 6d. imports, and 6d. exports.

Transshipments: Quarter import rates, Outer Harbour; half import rates, Inner or Breakwater Harbours.

Frozen or Chilled Meat, &c.—Imports free; exports 2s. 6d. per ton. Tallow and pelts, imports free; exports 3s. per ton.

Transshipments: Quarter import rates, Outer Harbour; half import rates, Inner or Breakwater Harbours.

Wool.—1s. per bale, exports only. Imports, free.

Transshipments: Wool, flax, skins, or tow, 3d. over side; 3d. per bale if landed for transshipment or dumping.

Coal.—1s. 9d. imports; 1s. exports.

Transshipments: Quarter-rates, Outer Harbour; half-rates, Inner or Breakwater Harbours. Coal for engines and freezing-ships, Outer Harbour, free, if declared so.

Timber.—3s. 4d. per 1,000 ft., imports; 1s. 3d. per 1,000 ft. exports.

Transshipments: Half-rates, Inner or Breakwater Harbours; quarter-rates, Outer Harbour.

NOTE.—Goods other than wool, skins, tow, meats, and flax landed on a wharf for transshipment to a vessel lying at another berth charged inward wharfage only when declared at time of entry.

WANGANUI.

General Merchandise.—Imports, 3s. per ton; exports, 2s. per ton.

Transshipments: Half-rates.

Grain and Agricultural Produce.—Imports, 3s. per ton; exports, 1s. 6d. per ton.

Potatoes, export, 1s. per ton.

Transshipments: Half-rates.

Frozen Meat.—Sheep, ½d. per carcass; lambs, ½d. per carcass; legs, shoulders, and loins calculated at so many to a carcass, according to freight.

Wool.—3d. per bale.

Transshipments: Half-rates.

Coal.—1s. 3d. per ton. Coal for ship's use, outward, 3d. per ton.

Transshipments: Half-rates.

Timber.—6d. per 100 ft.; for shipment, 2d.; white-pine, 1d.

Transshipments: Half-rates.

WELLINGTON.

General Merchandise.—2s. 8d. per ton inwards, including labour and one night's storage. Glass, acids, and special goods, 5s. per ton. Inward cargo landed after noon on Friday is stored free till noon on following Monday; landed after noon on Saturday is stored free till 5 p.m. on the following Tuesday. 1s. 4d. per ton outwards, including labour, Glass, acids, and special goods, 2s. 6d. per ton. Railway wharfage—1s. 4d. inwards, 8d. outwards, without labour.

- Transshipments:** 3s. per ton, including labour and seven nights' storage. Glass, acids, and special goods, 5s. per ton. Over side of vessel lying at wharf, 6d. per ton. If shifted more than quarter of a mile and less than half a mile, 6d. per ton extra; if shifted half a mile or over, 1s. per ton extra.
- Grain and Agricultural Produce.**—2s. 8d. per ton inwards, including labour and one night's storage; 1s. 4d. per ton outwards, including labour. Railway wharfage—1s. 4d. inwards, 8d. outwards, without labour.
- Transshipments:** 3s. per ton, including labour and seven nights' storage. Over side of vessel at wharf, 6d. per ton. If shifted more than quarter of a mile and less than half a mile, 6d. per ton extra; if shifted half a mile or over, 1s. per ton extra.
- Frozen Meat, Butter, &c.**—1s. inwards, 1s. outwards, per ton, without labour. Railway wharfage—1s. 4d. inwards, 8d. outwards, per ton, without labour. Dairy-produce treated as general merchandise.
- Transshipments:** Meat, 1s. 6d. per ton, without labour; butter, 3s. per ton, including labour and storage. Meat, butter, &c., over side of vessel at wharf, 6d. per ton. If shifted more than quarter of a mile and less than half a mile, 6d. per ton extra; if shifted half a mile or over, 1s. per ton extra.
- Wool.**—4d. per bale at Railway Wharf, without labour; 6d. per bale at other wharves, including labour.
- Transshipments:** 6d. per bale, including labour, and 3d. additional if stored. If shifted more than quarter of a mile, 3d. per bale extra; if shifted more than half a mile, 6d. per bale extra. Over side of vessel to vessel at wharf, 3d. per bale.
- Coal.**—1s. per ton imports, 6d. per ton exports, without labour. Railway wharfage—1s. per ton inwards, 6d. per ton outwards, without labour.
- Transshipments:** Across wharf for steamer's use, free. From vessel or hulk to vessel at wharf, 4d.; in Harbour, but not lying at wharf 2d. per ton.
- Timber.**—3d. per 100 ft. inwards; 2d. per 100 ft. outwards, without labour. If labour supplied, 3d. per 100 ft. added inwards, and 2d. outwards. Railway wharfage—3d. inwards, 2d. outwards, without labour.
- Transshipments:** 3s. per ton, including seven days' storage and labour. Over vessel's side into another vessel at wharf, 6d. per ton. If shifted over quarter of a mile and under half a mile, 6d. per ton extra; if half a mile or over, 1s. per ton extra.

NELSON.

- General Merchandise.**—2s. per ton, imports and exports, with labour.
- Transshipments:** Free when not landed on wharf; 2s. 6d. if landed.
- Grain and Agricultural Produce.**—1s. 6d. per ton, imports and exports, with labour.
- Transshipments:** Free when not landed on wharf; 2s. 6d. if landed.
- Frozen Meat, Butter, &c.**—1s. 6d. per ton.
- Transshipments:** Free when not landed on wharf, half-rates if landed.
- Wool.**—Exports, 1s. per bale; imports free.
- Transshipments:** Free when not landed on wharf; half-rates if landed.
- Coal.**—1s. per ton imports; 2s. with labour. Free exports; 2s. 6d. per ton with labour.
- Transshipments:** Free when not landed on wharf.
- Timber.**—1d. per 100 ft. super., import; 1d. per 100 ft. super., export; 2s. per ton by measurement: with labour.
- Transshipments:** Free when not landed on wharf; half-rates if landed on wharf. Reshipments, 2s. per ton.

WESTPORT.

- General Merchandise.**—2s. per ton, and 1s. per ton for receiving and delivering.
- Transshipments:** 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.

Grain and Agricultural Produce.—2s. per ton., and 1s. per ton for receiving and delivering.

Transshipments: 2s. 6d. per ton, including labour and one week's storage: 1s. per ton if transhipped to vessel or lighter.

Frozen Meat, Butter, &c.—2s. per ton, and 1s. per ton for receiving and delivering.

Transshipments: 2s. 6d. per ton, including labour and one week's storage.

Wool.—6d. per bale.

Transshipments: 2s. 6d. per ton, including labour and one week's storage: 1s. per ton if transhipped to vessel or lighter.

Coal.—6d. per ton.

Timber.—2d. per 100 ft. If for export and carried by rail, free.

GREYMOUTH.

General Merchandise.—3s. per ton. This charge includes 1s. a ton for receiving and delivering. Coke, bricks, and fireclay carried by rail for export, free.

Transshipments: 2s. 6d. per ton, including labour and one week's storage: 1s. per ton if transhipped to vessel or lighter.

Grain and Agricultural Produce—3s. per ton. This charge includes 1s. a ton for receiving and delivering.

Transshipments: 2s. 6d. per ton, including labour and one week's storage: 1s. per ton if transhipped to vessel or lighter.

Frozen Meat, Butter, &c.—3s. per ton. This charge includes 1s. a ton for receiving and delivering.

Transshipments: 2s. 6d. per ton, including labour and one week's storage.

Wool.—6d. per bale.

Transshipments: 2s. 6d. per ton, including labour and one week's storage: 1s. per ton if transhipped to vessel or lighter.

Coal.—6d. per ton inwards; outwards, free, if carried by rail.

Timber.—Inwards, 2d. per 100 ft.; outwards, free, if carried by rail.

Transshipment: Over side, 1d. per 100 ft.

LYTTELTON.

General Merchandise.—1s. 9d. per ton.

Transshipments: Free, whether landed on wharf or otherwise.

Grain and Agricultural Produce.—7½d. per ton; chaff, hay, &c., 1s. per ton.

Transshipments: Free.

Frozen Meat, Butter, &c.—6d. per ton.

Transshipments: Free, whether landed on wharf or otherwise.

Wool.—1s. per bale.

Transshipments: Free.

Coal.—9d. per ton.

Transshipments: Free, whether landed on wharf or otherwise.

Timber.—3½d. per 100 ft.

Transshipments: Free.

N.B.—All reshipments of goods from Lyttelton under declaration, free.

TIMARU.

General Merchandise.—2s. per ton.

Transshipments: Half-rates. Ship stores, free.

Grain and Agricultural Produce.—1s. 6d. per ton.

Transshipments: Half-rates.

Frozen Meat, Butter, &c.—1s. 6d. per ton weight.

Transshipments: Half-rates.

Wool.—1s. per bale.

Transshipments: Half-rates.

Coal.—2s. per ton.

Transshipments: Half-rates. For bunkering purposes, free.

Timber.—4d. per 100 ft.

Transshipments: Half-rates.

OAMARU.

General Merchandise.—2s. per ton.

Transshipments: Free.

Grain and Agricultural Produce.—2s. per ton.

Transshipments: Free.

Frozen Meat, Butter, &c.— $\frac{1}{2}$ d. per sheep. Butter, as merchandise, 2s. per ton.
Other frozen goods, 2s. per ton.

Transshipments: Free.

Wool.—6d. per bale.

Transshipments: Free.

Coal.—2s. per ton.

Transshipments: Free.

Timber.—5d. and 7d. per 100 ft. Fencing posts and rails, 4s. per 100. Palings,
7d. per 100.

Transshipments: Free.

Stone.— $\frac{1}{2}$ d. per foot.

Live Cattle and Horses.—2s. 6d. each; yearlings, half-rates. Sheep, 2d. each;
pigs, 4d. each.

OTAGO (DUNEDIN).

General Merchandise.—1s., 2s., 3s., 4s., and 5s. per ton, imports. (Classified.)
Exports: Beer 2s. per ton. A rate of 2s. per ton by weight upon all
flour, malt, meal, tallow, hides, wool, ores, and quartz. Cattle, 1s. 6d.;
calves, 1s.; pigs, 6d.; horses, 2s. 6d.; foals, 1s. 6d. each. All other
goods 6d. per ton export.

Transshipments: 1s. per ton.

Grain and Agricultural Produce.—1s. per ton, imports; 6d. per ton by weight,
exports; bran and pollard, exports, 6d. per ton; flour and oatmeal, 2s.
A rate of 6d. per ton by weight upon all barley, wheat, oats, rye, beans,
whole peas, maize, potatoes, turnips, carrots, onions, straw, hay, and
building-stone.

Transshipments: 1s. per ton.

Frozen Meat, Butter, &c.—Flax, fungus, rabbits, live-stock, and beef, 6d. per ton
exports (measurement); butter, imports, 4s. per ton; butter and
cheese, exports, 6d. per ton (weight); frozen meat, imports, 5s. per
ton, 6d. per ton exports.

Transshipments: 1s. per ton.

Wool.—Exports, 2s. per ton, wool, skins, and hides (three bales to ton); 1s. per
ton, imports (three bales to ton).

Transshipments: 1s. per ton by measurement.

Coal.—3s. per ton, imports; exports, 6d. per ton.

Transshipments: 1s. per ton.

Timber.—6d. and 3d. per 100 superficial feet, imports; exports, 6d. per ton
500 superficial feet.

Transshipments: 1s. per ton by measurement. Notice of transshipment
must be given within twenty-four hours after ship's arrival.

BLUFF.

General Merchandise.—1s. 10d. per ton, imports and exports.

Transshipments: Free when not landed on wharf; half-rates if landed.

Grain and Agricultural Produce.—11d. per ton, imports and exports.

Transshipments: Free when not landed on wharf; half-rates if landed.

Frozen Meat, Butter, &c.—11d. per ton, exports; cheese, 1s. per ton.

Transshipments: Free when not landed on wharf; half-rates if landed.

Wool.—Exports, 9d. per bale; imports, free.

Transshipments: Free when not landed on wharf; half-rates if landed.

Coal.—1s. 6d. per ton, imports; free exports.

Transshipments: 1s. 6d. per ton when landed ex hulk; free when not landed
on wharf.

Timber.—1s. per 1,000 ft. super., import; 1s. per 1,000 ft. super., export.

Transshipments: Free when not landed on wharf; half-rates if landed on
wharf.

LIGHTHOUSES.

Number of Light	Name of Lighthouse.	Order of Apparatus.	Fixed, Flashing, or Revolving.	Interval of Revolution or Flash.	Height, in Feet, above High Water.	Colour of Light.	Distance Visible in Nautical Miles.	Colour of Lighthouse.
1	*Cape Maria Van Diemen	1st order dioptric	Revolving Fixed	1 minute	330	White Red, to show over Columbia Reef	25	White.
1a	*Cape Brett	1st order dioptric	Group flashing	...	...	...	...	...
2	Moko Hinou	1st " "	Flashing Fixed	10 seconds	335	White	30½	White.
2a	Whangaparapara (Great Barrier)	6th order port light	Fixed	...	100	"	27	"
3	Cuvier Island	1st order dioptric	Revolving Fixed	30 seconds	390	"	27	Red.
4	*Tiritiri	2nd "	Fixed	...	300	White, with red arc over Flat Rock	24	White.
5	*Bean Rock	5th " "	Fixed	...	50	White, red, green	10	White.
5a	*Rangitoto Beacon	Pintch's patent gas-light (unwatched)	Occulting	5 seconds	68	White, showing 5 sec. flash and 5 sec. obscured	12	White and red vertical bands.
6	Ponui Passage	5th order dioptric	Fixed	...	50	White and red	10	White.
7	*East Cape	2nd " "	Flashing	10 seconds	332	White flash	26	"
7a	Tuahine Point	Acetylene gas (unwatched)	Occulting	Fl. 2 sec., ecl. 6 sec.	138	White	18	"
8	*Gisborne Leading-lights	Dioptric side-lights	Fixed	...	60, 40	White and Red	5	"
9	Portland Island	2nd order dioptric	Revolving Fixed	30 seconds	300	White	24	"
10	*Napier	4th order dioptric	"	...	160	Red, to show over Bull Rock	19	White
10a	Napier Leading-lights	2nd order dioptric	Fixed	...	70, 50	White and red	7	"
11	*Cape Palliser	2nd order dioptric	Group fl., 2 fl.	30 seconds	258	White; interval of 3 sec. between flashes	23	"
12	*Pencarrow Hd.	2nd Wigham patent	Fixed	...	322	White	25	"
13	*Somes Island	2nd order dioptric	"	...	32	White, with red arc	10	"
14	*Manawatu River	Ordinary lamp	"	...	95	White, red, and green	15½	"
15	*Wanganui River	6th order port light	"	...	44	White	5	"
16	*Patea	5th "	"	...	65	"	8	"
				...	130	Red	10	"

* An asterisk denotes those lighthouses which are in telephonic communication with telegraph system. † Harbour lights. ‡ Flashing twice every half-minute, with interval of three seconds between flashes.

NOTE.—The distance visible of lights of greater power than 5th order dioptric is calculated in nautical miles as seen from a height of 15 ft. above the sea. In very clear weather the lower-order lights may be seen at a greater distance than is given in this table.

NEW ZEALAND NEWSPAPERS.

THERE are (February, 1911) 237 publications on the register of newspapers for New Zealand. Of these, sixty-four are published daily, thirty-five are published three times a week, twenty-two twice a week, seventy-six once a week, three fortnightly, one three-weekly, one four-weekly, and thirty-five monthly.

The names of the newspapers, with the postal districts and towns in which they are printed, are given in the following list, the second column showing the day or period of publication.

M. signifies morning paper; E. evening paper.

Auckland—	AUCKLAND.		
Auckland Free Press (M.)	..	..	.. Saturday.
Auckland Star (E.)	..	..	.. Daily.
Auckland Weekly News and Town and Country Journal (M.)	..	..	.. Thursday.
Church Gazette (M.)	..	..	.. Monthly.
Glas Istine (M.)	..	..	.. Friday.
Liberator (E.)	..	..	.. Monthly.
New Zealand Farmer, Stock and Station Journal (M.)	..	..	..
New Zealand Herald (M.)	..	..	.. Daily.
New Zealand Home Journal, (M.)	..	..	.. Monthly.
New Zealand Illustrated Sporting and Dramatic Review	..	..	..
and Licensed Victuallers' Gazette (M.)	..	..	.. Thursday.
New Zealand Motor and Cycle Journal (M.)	..	..	.. Monthly.
New Zealand Observer (M.)	..	..	.. Saturday.
New Zealand Town and Country Life, Farmers' Weekly,	..	..	..
and Land Agents' Record (M.)	..	..	.. Wednesday.
New Zealand Yachtsman (E.)	..	..	.. Saturday.
New Zealand Leader (M.)	..	..	.. Friday.
Saturday Night (E.)	..	..	.. "
Sentinel and Sporting Times (E.)	..	..	.. "
Sharland's New Zealand Journal and Photographer (M.)	..	..	.. Monthly.
Social Democrat (E.)	..	..	.. Friday.
Sport, The Citizens' (E.)	..	..	.. Saturday.
Stage (M.)	..	..	.. Monthly.
Theosophy in New Zealand (M.)	..	..	..
Weekly Graphic and New Zealand Mail (M.)	..	..	.. Wednesday.
Cambridge—	..	..	..
Waikato Independent (E.)	..	..	.. Tues., Thur., Sat.
Coromandel—	..	..	..
Coromandel County News and Kuaotunu and Mercury Bay	..	..	..
Mail (E.)	..	..	.. Tuesday, Friday.
Dargaville—	..	..	..
North Auckland Times (E.)	..	..	.. Daily.
Wairoa Bell and Northern Advertiser (E.)	..	..	.. Tuesday, Friday.
Devonport—	..	..	..
Waitemata Post, Devonport, Northcote, and Birkenhead	..	..	..
Advertiser (E.)	..	..	.. Thursday.
Hamilton—	..	..	..
Waikato Argus (E.)	..	..	.. Daily.
Waikato Times, Thames Valley Gazette and Kawhia	..	..	..
Advocate (E.)	..	..	.. "
Helensville—	..	..	..
Kaipara Advertiser and Waitemata Chronicle (M.)	..	..	.. Wednesday.
Huntly—	..	..	..
Huntly Press and District Gazette (E.)	..	..	.. Friday.

AUCKLAND—continued.

Kawakawa—				
Bay of Islands Luminary (E.)	..	..	..	Friday
Kawhia—				
Kawhia Settler and Raglan Advertiser (E.)	..	..	..	"
Kohukohu—				
Hokianga Times and North-western Representative (E.)	..	..	..	Monday.
Mangonui—				
North Auckland Age (E.)	..	..	..	Friday.
Onehunga—				
Auckland and Manukau Times (M.)	..	..	..	Saturday.
Manukau Chronicle and Otahuhu Advocate (M.)	..	..	..	"
Manukau Gazette (M.)	..	..	..	"
Ohura—				
Ohura Advocate (E.)	..	..	..	Friday.
Raglan—				
Raglan County Chronicle (M.)	..	..	..	"
Rotorua—				
Hot Lakes Chronicle (M.)	..	..	..	Tues., Thur., Sat.
Rotorua Times (M.)	..	..	..	Daily.
Taumarunui—				
Taumarunui Press and Upper King Country Gazette (E.)	..	..	..	Tuesday, Friday.
Te Awamutu—				
Waipa Post (E.)	..	..	..	" "
Te Kuiti—				
King Country Chronicle (E.)	..	..	..	Wed., Saturday.
Warkworth—				
Rodney and Otamatea Times, Waitemata and Kaipara Gazette (E.)	..	..	..	Wednesday.
Whangarei—				
Northern Advocate (E.)	..	..	..	Daily.
Northern Advocate Weekly (E.)	..	..	..	Friday.
Northern Mail (M.)	..	..	..	Tues., Thur., Sat.
Northern Mail Weekly (M.)	..	..	..	Friday.
Karangahake—	THAMES.			
Goldfields Advocate (M.)	..	..	..	Saturday.
Opotiki—				
East Coast Guardian (E.)	..	..	..	Tues., Thur., Sat.
Opotiki Herald, Whakatane County and East Coast Gazette (E.)	..	..	..	Tuesday, Friday.
Paeroa—				
Ohinemuri Gazette (E.)	..	..	..	Mon., Wed., Fri.
Tauranga—				
Bay of Plenty Times (E.)	..	..	..	" " "
Te Aroha—				
Te Aroha and Ohinemuri News and Upper Thames Advocate (M.)	..	..	..	Tues., Thur., Sat.
Te Aroha Mail (M.)	..	..	..	" " "
Thames—				
Thames Advertiser (M.)	..	..	..	Daily.
Thames Star (E.)	..	..	..	"
Waihi—				
Waihi Daily Telegraph (E.)	..	..	..	"
Whakatane—				
Whakatane County Press (E.)	..	..	..	Tuesday, Friday.
Gisborne—	GISBORNE.			
Gisborne Times (M.)	..	..	..	Daily.
Poverty Bay Herald (E.)	..	..	..	"

NEW PLYMOUTH.

Inglewood—				
Inglewood Record and Waitara Age (E.)	..	..	Mon., Wed., Fri.	
New Plymouth—				
Budget and Taranaki Weekly Herald (M.)	..	..	Saturday.	
Taranaki Daily News (M.)	..	..	Daily.	
Taranaki Herald (E.)	..	..	"	
Opunake—				
Opunake Times (E.)	..	..	Tuesday, Friday.	
Stratford—				
Stratford Evening Post (E.)	..	..	Daily.	
Waitara—				
Waitara Evening Mail and Clifton County Chronicle (E.)			Mon., Wed., Fri.	
Dannevirke—	NAPIER.			
Dannevirke Advocate (E.)	..	..	Daily.	
Dannevirke Evening News (E.)	..	..	"	
Hastings—				
Hawke's Bay Tribune (E.)	..	..	"	
New Zealand Bulletin (M.)	..	..	Saturday.	
Napier—				
Daily Telegraph (E.)	..	..	Daily.	
Hawke's Bay Herald (M.)	..	..	"	
New Zealand Fire and Ambulance Record (M.)	..	..	Monthly.	
Waiapu Church Gazette (M.)	..	..	"	
White Ribbon (M.)	..	..	"	
Waipawa—				
Waipawa Mail (E.)	..	..	Tues., Thur., Sat.	
Waipukurau—				
Waipukurau Press (E.)	..	..	" " "	
Wairoa—				
Wairoa Guardian (E.)	..	..	Mon., Wed., Fri.	
Eltham—	WANGANUI.			
Eltham Argus (E.)	..	..	Daily.	
Hawera—				
Egmont Star (M.)	..	..	Friday.	
Hawera and Normanby Star, Patea County Chronicle, and Waimate Plains Gazette (E.)	..	..	Daily.	
Hunterville—				
Hunterville Express and Rangitikei Advertiser (E.)	..	..	Tues., Thur., Sat.	
Mania—				
Waimate Witness and Kaponga Advocate (E.)	..	..	Mon., Wed., Fri.	
Mangaweka—				
Mangaweka Settler (E.)	..	..	Tues., Thur., Sat.	
Marton—				
Rangitikei Advocate and Manawatu Argus (E.)	..	..	Daily.	
Ohakune—				
Ohakune Times, Rangataua Advocate, and Waimarino Gazette (E.)	..	..	Tues., Thur., Sat.	
Patea—				
Patea County Press (E.)	..	..	Mon., Wed., Fri.	
Raetihi—				
Waimarino County Call (E.)	..	..	" "	
Taihape—				
Taihape Daily Times and Waimarino Advocate (E.)	..	..	Daily.	
Wanganui—				
Good Cheer (M.)	..	..	Last week in m'th.	
Wanganui Chronicle (M.)	..	..	Daily.	
Wanganui Herald (E.)	..	..	"	
Weekly Chronicle and Patea-Rangitikei Advertiser (M.)	..	..	Thursday.	

WELLINGTON.

Carterton—				
Wairarapa Daily News (E.)	..	..	..	Daily.
Eketahuna—				
Eketahuna Express and County Gazette (E.)			..	Tues., Thur., Sat.
Feilding—				
Feilding Star and Kiwitea-Oroua County Gazette (E.)	..			Daily.
Foxton—				
Manawatu Herald (E.)	..	..	..	Tues., Thur., Sat.
Greytown—				
Wairarapa Standard and Featherston Advocate (E.)	..			Mon., Wed. Fri.
Levin—				
Horowhenua Chronicle (E.)	..	..	..	Daily.
Horowhenua County Record	..	..	..	Thursday.
Martinborough—				
Martinborough Star (E.)	..	..	..	Mon., Wed., Fri.
Masterton—				
Wairarapa Age (M.)	..	..	..	Daily.
Wairarapa Daily Times (E.)	..	..	..	"
Otaki—				
Otaki Mail and Horowhenua County and West Coast Advertiser (E.)	..	..	..	Mon., Wed., Fri.
Pahiatua—				
Pahiatua Herald (E.)	..	..	..	Daily.
Palmerston North—				
Manawatu Daily Times (M.)	..	..	..	"
Manawatu Evening Standard (E.)	..	..	..	"
Petone—				
Hutt and Petone Chronicle (E.)	..	..	..	Tues., Thur., Sat.
Upper Hutt—				
Hutt Valley Independent and Upper Hutt Advertiser (M.)				Thursday.
Wellington—				
Church Chronicle (M.)	..	..	..	Monthly.
Commonweal (E.)	..	..	..	..
Dominion (M.)	..	..	..	Daily.
Evening Post (E.)	..	..	..	..
Farmers' Union Advocate (E.)	..	..	..	Saturday.
Journal of the New Zealand Department of Agriculture (M.)	..	..	..	Monthly.
Katipo (E.)	..	..	..	"
Maoriland Worker (M.)	..	..	..	..
Mercantile Gazette of New Zealand (E.)	..	..	..	Wednesday.
Nation (M.)	..	..	..	Monthly.
New Zealand Craftsman (E.)	..	..	..	"
New Zealand Dairyman and Farmers' Union Journal (E.)	..	..	..	"
New Zealand Free Lance (M.)	..	..	..	Saturday.
New Zealand Gazette (E.)	..	..	..	Thursday.
New Zealand Primitive Methodist (M.)	..	..	..	Monthly.
New Zealand Railway Review (E.)	..	..	..	Four-weekly.
New Zealand Shipping and Commerce (E.)	..	..	..	Friday.
New Zealand Times (M.)	..	..	..	Daily.
New Zealand Trade Review and Price Current (M.)	..	..	..	Three-weekly.
New Zealand Truth (M.)	..	..	..	Saturday.
Progress (M.)	..	..	..	Monthly.
Weekly Herald (M.)	..	..	..	Saturday.
Woodville—				
Examiner (E.)	..	..	..	Mon., Wed., Fri.

Blenheim—		BLLENHEIM.	
Marlborough Express (E.)	..	..	.. Daily.
Havelock—			
Pelorus Guardian and Miners' Advocate (M.)	..	..	.. Tuesday, Friday.
Picton—			
Marlborough Press, County of Sounds Gazette (E.)	..	..	.. Mon., Wed., Fri.
Collingwood—		NELSON.	
Golden Bay Argus (E.)	..	..	.. Thursday.
Motueka—			
Motueka Star (E.)	..	..	.. Tuesday, Friday.
Nelson—			
Colonist (M.)	..	..	.. Daily.
Nelson Evening Mail (E.)	..	..	.. "
Takaka—			
Golden Bay Times (E.)	..	..	.. Thursday.
Charleston—		WESTPORT.	
Charleston Herald, Brighton Times, and Croninville Reporter (M.)	..	..	.. Saturday.
Murchison—			
Buller Post (E.)	..	..	.. Tuesday.
Westport—			
Buller Miner (M.)	..	..	.. Friday.
Westport News (M.)	..	..	.. Daily.
Westport Times and Evening Star (E.)	..	..	.. "
Greymouth—		GREYMOUTH.	
Evening Star and Brunnerton Advocate (E.)	..	..	.. Daily.
Grey River Argus (M.)	..	..	.. "
Reefton—			
Inangahua Herald and New Zealand Miner (M.)	..	..	.. "
Inangahua Times and Reefton Guardian (E.)	..	..	.. "
Hokitika—		HOKITIKA.	
Hokitika Guardian and Evening Star (E.)	..	..	.. Daily.
West Coast Times (M.)	..	..	.. "
Kumara—			
Kumara Times and Dillman's and Goldsborough Advertiser (E.)	..	..	.. "
Akaroa—		CHRISTCHURCH.	
Akaroa Mail and Banks Peninsula Advertiser (M.)	..	..	.. Tuesday, Friday.
Ashburton—			
Ashburton Guardian (E.)	..	..	.. Daily.
Ashburton Mail, Rakaia, Mount Somers, and Alford Forest Advertiser (M.)	..	..	.. Tues., Thur., Sat.
Cheviot—			
Cheviot News (M.)	..	..	.. Tuesday, Friday.
Christchurch—			
Canterbury Times (incorporating "Sportsman" and "New Zealand Cyclist") (M.)	..	..	.. Wednesday
Christian Herald (E.)	..	..	.. Monthly.
Dominion Scout, (M.)	..	..	.. "
Evening News (E.)	..	..	.. Daily.
Examiner (M.)	..	..	.. Monthly.
Layman (M)	..	..	.. "
Loco. Record (M)	..	..	.. "
Lyttelton Times (M.)	..	..	.. Daily.

CHRISTCHURCH—*continued.*Christchurch—*continued.*

New Zealand Baptist (E.)	..	..	..	Monthly.
New Zealand Church News (M.)	..	..	..	"
New Zealand Methodist Times (M.)	..	..	..	Sat., fortnightly.
New Zealand Poultry Journal (M.)	..	..	..	Monthly.
New Zealand Tatler (M.)	..	..	..	"
Observer (M.)	..	..	..	Saturday.
Press (M.)	..	..	..	Daily.
Spectator (M. and E.)	..	..	..	Saturday.
Star (E.)	..	..	..	Daily.
Vanguard (E.)	..	..	..	Sat., fortnightly.
War Cry and Official Gazette of the Salvation Army of New Zealand (M.)	..	..	..	Saturday.
Weekly Press (incorporating "Referee") (M.)	..	..	..	Wednesday.

Kaiapoi—

Kaiapoi Record (M.)	..	..	..	Wednesday.
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Kaikoura—

Kaikoura Star and Kaikoura County Gazette and Recorder (E.)	..	..	..	Daily.
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Rangiora—

Standard and North Canterbury Guardian (M.)	..	..	..	Wed., Saturday.
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Southbridge—

Ellesmere Guardian (M.)	..	..	..	" "
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Geraldine—

TIMARU.

Geraldine Mail (M.)	..	..	..	Tues., Thur., Sat.
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Temuka—

Geraldine Guardian (M.)	..	..	..	" " "
Temuka Leader (M.)	..	..	..	" " "

Timaru—

Timaru Herald (M.)	..	..	..	Daily.
Timaru Post (E.)	..	..	..	"

Waimate—

Waimate Advertiser (E.)	..	..	..	Mon., Wed., Fri.
Waimate Times (M.)	..	..	..	Tues., Thur., Sat.

Oamaru—

OAMARU.

North Otago Times (M.)	..	..	..	Daily.
Oamaru Mail (E.)	..	..	..	"

DUNEDIN.

Alexandra South—

Alexandra Herald and Central Otago Gazette (E.)	..	..	..	Wednesday.
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Balclutha—

Clutha Leader (M.)	..	..	..	Tuesday, Friday.
Free Press (M.)	..	..	..	" "

Clyde—

Dunstan Times, Vincent County Official Gazette, and General Goldfields Advertiser (E.)	..	..	..	Monday.
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Cromwell—

Cromwell Argus and Northern Goldfields Gazette (E.)	..	..	..	"
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Dunedin—

Budget (M.)	..	..	..	Monthly.
Evening Star (E.)	..	..	..	Daily.
Farmers' Circular (M.)	..	..	..	Thur., fort'nly.
Magpie (M.)	..	..	..	Monthly.
New Zealand Guardian (M.)	..	..	..	"

DUNEDIN—*continued.*Dunedin—*continued.*

New Zealand Journal of Education (M.)	..	..	Monthly.
New Zealand Railway Officers' Advocate (M.)	..	..	"
New Zealand Tablet (M.)	..	..	Thursday.
New Zealand Tribune (M.)	..	..	Friday.
Otago Daily Times (M.)	..	..	Daily.
Otago Witness (M.)	..	..	Wednesday.
Outlook (M.)	..	..	Saturday.
Triad (M.)	..	..	Monthly.

Lawrence—

Tuapeka Times (M.)	..	..	..	Wed., Saturday.
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Milton—

Bruce Herald (E.)	..	..	..	Mon., Thursday.
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Mosgiel—

Taiari Advocate (E.)	..	..	..	Mon., Wed., Fri.
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Naseby—

Mount Ida Chronicle (M.)	..	..	..	Friday.
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Palmerston—

Palmerston and Waikouaiti Times (M.)	..	..	..	"
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Roxburgh—

Mount Benger Mail (M.)	..	..	..	Wednesday.
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Tapanui—

Tapanui Courier and Central Districts Gazette (M.)	..	..	..	"
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Arrowtown—

INVERCARGILL.

Lake County Press (E.)	..	..	..	Thursday.
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Bluff—

Bluff Press and Stewart Island Gazette (E.)	..	..	..	Tuesday.
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Gore—

Gore Standard (M.)	..	..	..	Mon., Wed., Fri.
Mataura Ensign (E.)	..	..	..	Daily.

Invercargill—

Critic (M)	..	..	..	Saturday.
Southern Cross (M.)	..	..	..	"
Southland Daily News (E.)	..	..	..	Daily.
Southland Times (M.)	..	..	..	"
Southlander (M.)	..	..	..	Friday.
Weekly Times (M.)	..	..	..	"

Orepuki—

Orepuki Advocate and Western District Advertiser (M.)	..	..	..	Saturday.
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Otautau—

Otautau Farmer and Wallace County Gazette (M.)	..	..	..	Wednesday.
Otautau Standard and Wallace County Chronicle (E.)	..	..	..	Tuesday.

Queenstown—

Lake Wakatipu Mail (E.)	..	..	..	"
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Riverton—

Western Star and Wallace County Gazette (E.)	..	..	..	Tues., Friday.
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Winton—

Winton Record, Hokonui Advocate, and Awarua Guardian (M.)	..	..	..	Friday.
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Wyndham—

Wyndham Farmer (M.)	..	..	..	Tuesday, Friday.
Wyndham Herald (M.)	..	..	..	" "

The foregoing towns are arranged according to the postal district in which they are situated.

PART II —STATISTICAL

* SECTION I.—EDUCATION OF THE PEOPLE.

Of every 100 persons in New Zealand 83·5 could read and write, 1·6 could read only, and 14·9 could neither read nor write at the time of the census of 1906. The proportion able to read and write has increased, and that of persons who cannot read has decreased, steadily since 1874. The figures are given for four censuses :—

		Read and write.	Read only.	Cannot read.
Census 1874	..	68·15	8·09	23·76
" 1886	..	74·01	4·80	21·19
" 1896	..	80·60	2·89	16·51
" 1906	..	83·50	1·60	14·90

To ascertain, however, how completely education is carried out, accepting as a test the knowledge of reading and writing, it is necessary to show the position at present in respect of age periods, which is accordingly given.

At the period under five years none are found to read and write, and only 0·37 were able to read; 99·63 being unable to do either on account of extreme youth. At five to ten years 65·51 could read and write, and 10·14 read only, leaving 24·35 who could not read. But this last includes only three years of the school-going period.

With the subsequent periods up to forty years figures under "Read only" and "Cannot" are reduced to small fractions as under :—

		Read and write.	Read only.	Cannot read.
10 to 15 years	..	99·45	0·22	0·33
15 to 20 "	..	99·63	0·08	0·29
20 to 25 "	..	99·56	0·08	0·36
25 to 30 "	..	99·43	0·13	0·44
30 to 35 "	..	99·35	0·16	0·49
35 to 40 "	..	99·12	0·24	0·64

At forty to forty-five years those who "cannot read" are over 1 per cent., and the proportion goes on increasing regularly, thus :—

		Read and write.	Read only.	Cannot read.
50 to 55 years	..	96·32	1·53	2·15
60 to 65	..	94·05	2·53	3·42
70 to 75	..	89·15	5·12	5·73
80 and upwards	..	86·14	6·12	7·74

The improved conditions of the young people are clearly shown above. At the last two periods given, which belong to advanced life, 5.34 per cent. and 6.22 per cent. are found to be either "reading only" or quite illiterate.

PUBLIC EXPENDITURE ON EDUCATION.

In the following tables an attempt has been made to analyse the public expenditure on the various branches of education. The first table shows the total amount expended both from the public account and out of income from endowments during the years ended 31st March, 1909 and 1910. The figures are given to the nearest £1,000.

Branch of Education.	1908-9.			1909-10.		
	Out of Public Funds.	Out of Income from Endowments.	Total.	Out of Public Funds.	Out of Income from Endowments.	Total.
	£	£	£	£	£	£
Primary (including Native schools and training colleges)	758,000	53,000	811,000	769,000	81,000	850,000
Secondary (including secondary departments of district high schools)	74,000	36,000	110,000	80,000	44,000	124,000
Continuation and technical	59,000	..	59,000	58,000	7,000	65,000
Higher (including university and higher technical)	26,000	27,000	53,000	39,000	33,000	72,000
Industrial schools ..	917,000	116,000	1,033,000	946,000	165,000	1,111,000
Special schools (deaf, blind, &c.)	39,000	..	39,000	33,000	2,000	35,000
	17,000	..	17,000	9,000	1,000	10,000
Superannuation and miscellaneous	7,000	..	7,000	10,000	..	10,000
	980,000	116,000	1,096,000	998,000	168,000	1,166,000

In 1908-9 teachers' salaries and allowances amounted to £536,000; repairs and re-building, £66,000; new buildings, £51,000; all other expenses, £158,000. In 1909-10 the corresponding expenditure was £604,000, £64,000, £53,000, and £129,000

respectively. The amount expended per head of population, including Maoris, but not residents in the Cook and other Pacific Islands, was as follows:—

Branch of Education	1908-9.			1909-10.		
	Out of Public Funds.	Out of Income from Endowments.	Total.	Out of Public Funds.	Out of Income from Endowments.	Total
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Primary (including Native schools and training colleges)	15 0	1 1	16 1	14 11	1 7	16 6
Secondary (including secondary departments of district high schools)	1 5	0 9	2 2	1 7	0 10	2 5
Continuation and technical ..	1 2	..	1 2	1 1	0 2	1 3
Higher (including university and higher technical)	0 6	0 6	1 0	0 8	0 8	1 4
Industrial schools ..	18 1	2 4	20 5	18 3	3 3	21 6
Special schools (deaf, blind, &c.)	0 9	..	0 9	0 8	..	0 8
Superannuation and miscellaneous	0 4	..	0 4	0 3	..	0 3
	0 2	..	0 2	0 3	..	0 3
	19 4	2 4	21 8	19 5	3 3	22 8

It may be of interest to give the expenditure per head of population in some other places and countries: For primary education, public funds (general and local) contribute per head of the population in England and Wales, 12s. 3d.; London, 17s.: Wales alone, 15s. 5d.; Scotland, 12s. 4d.; Ireland, 6s. 7d. In New York, the cost to the public purse of primary and secondary education (excluding the cost of new buildings) is £1 1s. 7d. per head of the population, as against 14s. 11d. (or 16s. 6d. including the income from reserves) in New Zealand.

The following table shows the total amount expended on education out of the public funds only, and the amount per head of population during each of five financial years:—

Year.	Amount expended out of Public Funds.	Expenditure per Head of Population out of Public Funds.
	£	s. d.
1898-99	519,000	13 4
1903-4	679,000	15 6
1906-7	926,000	19 4
1907-8	947,000	19 5
1908-9	987,000	19 4
1909-10	998,000	19 5

PUBLIC INSTRUCTION.

Education at the public schools is free (except that, at such as are also district high schools, fees are charged for the teaching of the higher branches) and purely secular. The attendance of all children between the ages of 7 and 14 is compulsory, except when special exemptions are granted, or a child is being otherwise sufficiently educated.

The subjects taught at the primary schools are required by the Education Act to be the following: Reading, writing, arithmetic, English grammar and composition, geography, history, (including civic instruction), elementary science and drawing, object-lessons, vocal music, physical instruction, moral instruction, nature-study, health, and (in the case of girls) sewing and needlework, the principles of domestic economy, also handwork for both sexes. Provision must also be made for the instruction in military drill of all boys in these schools.

The Dominion is divided into thirteen education districts, over each of which an Education Board presides, and into smaller districts, in each of which a School Committee elected by the householders has authority, subject to the general control of the Board, which is elected by the Committees of the district. The Board of an education district receives and disburses the money voted by the General Assembly for purposes of instruction, and, subject to the condition of consultation with the Committee of the school district, appoints the teachers. The Boards also appoint the Inspectors. The Governor in Council makes general regulations for the inspection and examination of the schools, and also makes the regulations under which certificates are granted to teachers after examination and adequate experience.

Since the year 1895 children out of the reach of a primary school, but living near to a convenient line of railway, have been granted free passes to the nearest public school or private school; in 1902 this privilege was extended to holders of scholarships and free places in secondary schools, district high schools, and technical schools; and at the beginning of the year 1909, the same concession was granted to other secondary pupils who were compelled to travel by rail in order to attend school. The amount paid in railway fares on this account in 1909 was £13,186.

Where conveyance by rail is not possible, grants are made to Education Boards to enable children in outlying localities to

attend central public schools. The allowance for this purpose is at the rate of 6d. per child for each day of attendance at school, and the total expenditure in 1909 amounted to £2,755, as against £1,005 in 1908.

When a child, through the impracticability of conveyance, has to live away from home in order to attend a public school, a sum of 2s. 6d. per week is allowed in each case in aid of board and lodging. The total expenditure under this head in 1909 was £138.

Free text-books are now provided for the pupils of the preparatory classes and the classes of Standards I, II, III, and IV in the public schools.

An illustrated paper, called the *School Journal*, is published monthly by the Education Department, for free circulation among pupils attending public primary schools, and for sale to private schools. The *Journal* is issued in three parts, each part being adapted to the educational attainments of pupils in two of school Standards I to VI. It is claimed that although the *Journal* aims primarily at being instructive rather than recreative there is ample evidence that its appearance each month is welcomed by the children, and that its influence tends to the very desirable end of fostering the habit and the love of reading. It differs from most of the miscellaneous Readers in that, being composed largely of articles belonging to well-defined series of courses, it preserves a continuity absent from ordinary Readers. These courses deal with the history and geography of New Zealand, of the rest of the British Empire, and foreign countries, from the point of view of the human interests involved, so far as these appeal to a child's mind; with nature-knowledge of various kinds—the object being to extend what the pupils have learnt by their own observation, not to give information as a substitute for actual observation; with practical matters of hygiene; with civics and moral instruction; and with current topics, such as Antarctic exploration, Empire Day, Arbor Day and so forth.

SCHOOL STATISTICS TO 31ST DECEMBER, 1909.

It has been found impossible to collect the full statistics relating to schooling for the year 1910 in time for this work, and the figures for the previous year are accordingly given.

The number of schools, teachers, and scholars, as in December, 1909, are shown in the following summary:—

Description of Schools.	Number of Schools.	Number of Instructors.			Number of Scholars at the End of the Year 1908.		
		M.	F.	Total.	Boys.	Girls.	Total.
EUROPEAN.							
Public (Government) schools (scholars other than Maoris and half-castes) ..	2,057	1,572	2,738	4,310	77,526	70,456	147,982
Public (Government) schools (half-castes living among Europeans) ..					695	646	1,341
Secondary schools (aided or endowed) ..	31	131	93	*224	2,911	1,945	4,856
Secondary pupils, technical day-schools	..	..	..	..	1,207	1,000	2,207
Private schools† ..	306	110	790	900	7,597	10,333	17,930
Industrial schools and orphanages ..	..	..	..	..	533	385	918
Native village schools, European children attending ..	..	..	..	..	206	185	391
Private Native boarding-schools, Euro- pean children attending ..	..	..	..	..	4	..	4
School for Deaf-mutes ..	1	..	..	..	49	40	89
Jubilee Institute for Blind ..	1	1	2	3	17	13	30
Totals—Europeans ..	2,396	1,814	3,623	5,437	90,745	85,003	175,748
NATIVE.							
Native village schools supported by Gov- ernment (excluding European children stated above) ..	94	79	119	§198	2,052	1,678	3,730
Private Native boarding-schools (main- tenance of scholars paid by Govern- ment) ..	9	11	15	26	51	73	124
Private Native boarding-schools (main- tenance of scholars paid from endow- ments) ..					115	118	233
Private Native day-schools ..	7	5	9	14	133	105	238
Public (Government) schools, Maoris attending ..	..	..	..	..	1,618	1,198	2,816
Public (Government) schools, half-castes living as Maoris attending ..	..	..	..	..	148	129	277
Private schools for Europeans, Maoris attending ..	..	..	..	..	23	36	59
Totals—Natives ..	110	95	143	238	4,140	3,337	7,477

* Excluding 83 visiting teachers.
 † Excluding men, women, lads, and girls, in addition to the children in the school, who were receiving technical and industrial training.
 ‡ And 5 sewing-mistresses.

Thus at the end of 1909 there were 2,506 schools of all classes at which members of the European and Maori races were being educated. This was an increase of 59 on the number in 1908. The public primary schools numbered 2,057 in 1909, against 1,998 in 1908. The number of aided or endowed colleges, grammar, and high schools was 31, 1 more than in the previous year. The number of private schools from which returns were received by the Registrar-General was 306, an increase of 3. There were also 11 industrial schools and orphanages, public and private, at which education was given, as well as a school for the deaf subsidized by Government, and a school for the blind.

The number of schools established for the education of the Native or Maori race was 110.

Public (Government) Schools.

Compared with 1908, there was in 1909 an increase of 4,988 in the number of pupils belonging to the public schools at the end of the year, and the average attendance shows an increase of 5,613 for the whole year.

SCHOOL ATTENDANCE AND YEARLY INCREASE FROM 1877 TO 1909.

School Attendance.				Yearly Increase on			
Year.	Number belonging at Beginning of Year.	Number belong- ing at End of Year.	Average Attendance.*	Average Attend- ance expressed as Percentage of Roll-number.	Number belonging at Beginning of Year.	Number belonging at End of Year.	Average Attendance.†
			Whole Year.				Whole Year.
1877	...	55,688	...	...	...	...	...
1878	50,849	65,040	45,521	...	...	9,352	...
1879	59,707	75,566	53,067	73.8	8,858	10,526	7,546
1880	68,124	82,401	60,625	74.6	8,417	6,835	7,558
1881	74,359	83,560	61,822	74.2	6,235	1,159	1,197
1882	76,309	87,179	68,709	73.6	1,950	3,619	1,887
1883	79,416	92,476	67,373	74.0	3,107	5,297	3,664
1884	84,883	97,238	72,657	75.1	5,467	4,762	5,284
1885	90,670	102,407	78,327	76.6	5,787	5,169	5,670
1886	95,377	106,328	80,737	76.1	4,707	3,921	2,410
1887	99,206	110,919	85,637	77.0	3,829	4,591	4,900
1888	103,524	112,685	90,108	79.3	4,328	1,766	4,471
1889	104,919	115,456	93,374	80.3	1,385	2,771	3,266
1890	106,158	117,912	94,632	79.9	3,239	2,456	1,258
1891	110,665	119,523	97,058	80.3	2,507	1,611	2,426
1892	112,279	122,620	99,070	80.6	1,614	3,097	2,012
1893	114,305	124,686	98,615	78.5	2,026	2,066	[-455]
1894	116,819	127,300	104,996	81.8	2,514	2,614	4,875
1895	119,500	129,856	108,394	82.8	3,081	2,556	3,396
1896	122,425	131,037	110,517	83.3	2,525	1,181	2,123
1897	123,523	132,197	112,328	83.9	1,108	1,160	1,811
1898	123,892	131,621	111,636	83.4	359	[-576]	[-692]
1899	123,207	131,315	110,316	82.6	[-685]	[-306]	[-1,320]
1900	123,416	130,724	111,747	84.1	209	[-591]	1,431
1901	122,725	131,351	111,797	84.1	[-691]	627	50
1902	123,456	132,262	113,711	84.9	731	911	1,914
1903	124,095	133,568	113,047	83.9	639	1,306	[-664]
1904	125,150	135,475	116,566	85.5	1,055	1,907	3,459
1905	126,653	137,623	120,265	86.9	1,503	2,148	3,759
1906	128,428	139,302	121,958	86.9	1,675	1,679	1,693
1907	129,534	141,071	120,026	84.6	1,208	1,769	[-1,932]
1908	130,866	147,428	127,160	87.1	1,330	6,357	7,134
1909	134,943	152,416	132,773	87.8	4,077	4,988	5,613

* From 1877 to 1893 (inclusive) the "strict" average is given, and for subsequent years the "working" average. † From 1877 to 1894 (inclusive) the increase on the "strict" average is given, and for subsequent years that on the "working" average.

For each quarter of the year 1907 the average of the weekly roll-numbers showed an increase over that for the corresponding quarter of 1908. The mean of the average weekly roll for the four quarters was 151,142 for 1909, as against 145,974 for 1908, an increase of 5,168, making the total roll greater than in any previous year. Although the additions to the roll were most marked in the North Island, every district showed at least some increase. The increase was most marked in the September quarter of the year. The number on the roll at the end of the year was 152,416, as against 147,428 for the previous year, an increase of 4,988.

AGE AND SEX OF PUPILS.

The following table shows the age and sex of the pupils on the rolls of the public schools of the Dominion at the end of 1909, and the percentage of the roll for each age.

AGE AND SEX OF PUPILS, DECEMBER, 1909.

Ages.	Boys.	Girls.	Total.	Percentages for Five Years.				
				1905.	1906.	1907.	1908.	1909.
5-6 years ..	7,074	6,166	13,240	8·1	8·3	8·0	8·2	8·7
6-7 " ..	8,602	7,889	16,491	10·3	10·6	10·5	10·6	10·8
7-8 " ..	9,243	8,504	17,747	11·4	11·1	11·6	11·7	11·6
8-9 " ..	8,991	8,331	17,322	11·5	11·5	11·1	11·3	11·4
9-10 " ..	8,902	8,278	17,180	11·5	11·4	11·4	11·0	11·2
10-11 " ..	8,540	7,762	16,302	11·3	11·4	11·3	11·2	10·7
11-12 " ..	8,391	7,739	16,130	11·2	11·1	11·0	10·9	10·6
12-13 " ..	8,061	7,438	15,499	10·6	10·5	10·5	10·4	10·2
13-14 " ..	6,913	6,087	13,000	8·3	8·3	8·7	8·4	8·5
14-15 " ..	3,696	2,893	6,589	3·9	4·0	4·0	4·2	4·3
	78,413	71,087	149,500	98·1	98·2	98·1	97·9	98·0
15 and over ..	1,574	1,342	2,916	1·9	1·8	1·9	2·1	2·0
Totals ..	79,987	72,429	152,416	100·0	100·0	100·0	100·0	100·0

Of the children in the public schools, 53·8 per cent. are under ten, and 46·2 are over that age; the corresponding percentages for 1908 were 52·8 and 47·2. The proportion of children under ten continues, as in past years, to show a slight increase. This is probably to be accounted for partly by the increase in the population of the Dominion, partly by the larger number entering the secondary schools, especially between the ages of thirteen and fourteen.

The proportion of boys to girls remains about the same as for the previous six years, 52·48 per cent. to 47·52 per cent.—that is, for every 100 boys on the roll there are 91 girls. The proportion is the same if we omit those over fifteen years of age. According to the census of 1906 there were in New Zealand, between the ages of five and fifteen, 97 girls for every 100 boys. The difference in the proportion on the school rolls is partly accounted for by reference to the number enrolled between the ages of five and seven—for every

100 boys between these limits there are on the rolls of the public schools only 90 girls; in other words, speaking generally, girls are not sent to school at so early an age as boys. The second important source of leakage is found between the ages of twelve and fifteen, where the ratio of girls to boys on the school rolls is 88 to 100; this seems to mean that more girls than boys are taken away from the primary schools at the age-period named. The number of girls to every 100 boys between twelve and fifteen years of age at the secondary schools of the Dominion is only 63; so that the leakage is not accounted for in this direction. Apparently there are a certain number of parents who think that it is sufficient for a girl to have little more than half the amount of schooling that a boy receives. Attention was called to this fact in last year's report. Home reasons no doubt account for some cases, but probably the chief cause is the thoughtlessness of parents who consider education less important for girls than for boys. The obvious remedy would appear to be a stricter enforcement of the attendance sections of the Act. There would be less excuse, however, for thoughtless parents who withdraw their girls too soon from school attendance if it was an established practice in all schools to give practical domestic instruction to the elder girls.

PUBLIC-SCHOOL TEACHERS.

The number of teachers in the public schools, exclusive of those employed in the secondary departments of district high schools in December, 1908, and December, 1909, respectively, was as follows:—

Adults,—					1908.	1909.
Men	..	..	..	..	1,331	1,406
Women	..	..	..	..	2,021	2,208
Total	..	..	..	..	3,352	3,614
Pupil-teachers,—						
Male	..	..	..	..	161	166
Female	..	..	..	..	476	530
Total	..	..	..	..	637	696
All teachers,—						
Male	..	..	..	..	1,492	1,572
Female	..	..	..	..	2,497	2,738
Total	..	..	..	..	3,989	4,310

For the schools above Grade I having only one teacher—that is, schools with 16 to 35 children in average attendance—the average number of children per teacher—or, in other words, per school—was 24.13. Taking all schools with two or more teachers, we find that the average number of pupils per adult teacher, if we reckon two pupil-teachers as equivalent to one adult, was 40.44; and with the same assumption the average for all schools of Grade II and upwards was 37.6.

Omitting teachers of schools below Grade II, the ratio of adult men teachers to adult women teachers in 1909 was 100 to 140; in 1908 it was 100 to 126. The proportion of men to women in charge of schools of Grade I and Grade 0 has increased from 71 out of a total of 504 in 1908 to 138 out of 569 in 1909. If we include all public schools and all adult teachers, we find that the ratio of adult men teachers to adult women teachers was 100 to 152 in 1908, and 100 to 157 in 1909. The increase in the proportion of women employed in the profession is more than accounted for by the number of assistant mistresses appointed in 1909 to schools having thirty-six to forty in average attendance; omitting these, the proportion of men to women among the primary teachers in the Dominion was slightly higher in 1909 than in 1908.

The ratio of male pupil-teachers to female pupil-teachers was 1 to 3.19 in 1909, as against 1 to 2.96 in 1908.

It may be interesting to note the corresponding proportions for primary-school teachers, secondary teachers in district high schools, and secondary schools (exclusive of visiting teachers), and for students in training colleges, respectively:—

NUMBER OF WOMEN TEACHERS OR STUDENTS PER HUNDRED MEN TEACHERS OR STUDENTS (OMITTING TEACHERS OF SCHOOLS WITH FIFTEEN OR LESS IN AVERAGE ATTENDANCE).

	1906.	1907.	1908.	1909.
Adult primary teachers ..	125	124	126	140
Pupil-teachers ..	339	277	296	319
Secondary teachers ..	80	77	76	82
Training-college students ..	350	315	286	280
All teachers and students	148	142	144	158

In other words, out of a total of 4,446 persons engaged in the above-named branches of the teaching profession there were in 1909, 1,721 men and 2,725 women.

Remembering that a much larger number of women than of men leave the profession after a few years of service, we may form some idea of the extent to which New Zealand has been affected by the general tendency all over the world towards the increase of women in the teaching profession.

So far as can be gathered from the reports received from England, Scotland, and the United States, the following statement shows the number of women teachers per hundred men teachers:—

	England.	Scotland.	United States.	New Zealand (1909).
Adult primary teachers ..	326	252	388	140
Pupil-teachers ..	323	456	..	319
Secondary teachers ..	..	..	117	82
Training-college students	239	396	321	280

The above figures refer in the cases of England and Scotland to the year 1907-8, of the United States to 1907. The number of secondary-school teachers in England and Scotland is not available.

TRAINING OF TEACHERS.

Four training colleges for teachers have now for some time been in active operation, and in only one of the four does the number of students fall materially below the full complement for which the colleges were intended to provide. At the close of the year the students in attendance numbered 319, of whom 84 were men and 235 were women. The corresponding total for the close of 1908 was 274, of whom 71 were male students. Among those attending during the year have also to be reckoned a few students who left before the close of the period either to go into active service under the Boards or for some other reason. The total provision in contemplation is for 100 students in each of the centres. Towards this number, out of the total reported, Wellington contributes 91; Dunedin 94; Christchurch 89; and Auckland 45.

The course of training extends over two years, but in the case of those who have already undergone a preliminary training as pupil-teachers, it has not always been deemed necessary to require the full period of attendance. In a very few instances, as has been determined in its discretion by the Board controlling the training college, an attendance of one year has been accepted; but the great bulk of the students remain for two years, and it is so intended.

Connected with each training college is a normal or practising school, which includes, besides the ordinary classes of a public elementary school, a kindergarten division, a model "country" school of forty children, and a secondary department. The secondary department affords opportunities of practical training to those who intend to take up secondary work either in the high schools or in the upper departments of district high schools.

According to the regulations adopted, students of a training college take English and other non-special subjects at the university college, and attend lectures in the methods of teaching and in the history and principles of education, under the principal, who is generally also by appointment the university college lecturer in education. Every one is required to take up at least one branch of science, special attention being directed to nature-study and elementary agriculture; and handwork of various forms suited to school purposes also receives a prominent place in the curriculum.

A pupil-teacher in any education district who has satisfactorily completed his term of service may enter at the training college most convenient for him, the complete course extending over two years. During this period he receives, in addition to the amount of his university college fees, a sum of £30 a year, with a further allowance of £30 if he is compelled to live away from home to attend the college. Advantages not quite so great are also offered to other qualified candidates who have not been pupil-teachers. Others again may be admitted for longer or shorter periods although they may for some time have been engaged in the practice of their profession.

The amount paid during 1909 for the training of teachers was £35,452, made up as follows:—

					£
Training college—					
Salaries of staff	..	..	..	..	6,288
Students' allowances	..	..	..	..	13,210
University fees of students	..	..	..	..	2,776
Libraries	..	..	..	..	92
Apparatus	..	..	..	..	40
Buildings	..	..	..	..	5,691
Total	..	..	..	..	£28,092
Other training—					
Grants for special instruction in handwork, including agriculture, of teachers other than training-college students	..	..	..	..	£ 2,340
Railway fares of teachers and instructors	..	..	..	..	5,020
Total	..	..	..	..	£7,360

It must be remembered, however, that this total provides not only for the efficient training of 319 teachers, but the instruction of over fifteen hundred children in attendance at the practising schools.

TEACHERS' SUPERANNUATION.

On 1st January, 1906, a fund was established, to provide annual allowances to teachers upon their retirement from the service by reason either of infirmity or age. The fund is supported by contributions from salaries ranging from five to ten per cent., and the State guarantees to make good any deficiency that may occur.

The age of retirement is compulsory at 65 years, and optional at 60 years for males, and for females 60 years and 50 years, respectively. Allowances are based upon length of service, and provision is made for widows and orphans of members who may die before retirement.

The number of contributors to the fund on 31st December, 1909, was 3,152, the number of persons receiving allowances on that date was 216, of whom 38 were widows and 41 children, representing a total annual payment of £9,500. The balance to the credit of the fund was £118,615.

INCOME AND EXPENDITURE OF EDUCATION BOARDS.

The total income of the various Education Boards for the year 1909 was £871,033 5s., including £18,940 9s. 7d. of refunds, fines, fees, donations, interest, &c. The grants by Government amounted to £794,810, and receipts from education reserves to £57,282 3s. 6d. These grants consist of payments to the Board of every district of a sum sufficient to pay the salaries of teachers and pupil-teachers in the district, and further payments of a sum of £250 per annum, together with a sum of 11s. 3d. per annum for each child in daily average attendance at a public school. (The Governor may by Order in Council declare that in lieu of the payments last named there shall be paid to the Boards a capitation allowance of 12s.,

and in addition £250 per annum to each Board having a daily average attendance of less than 8,000 children.) There is also a varying sum for the establishment and maintenance of normal or training-schools, and for the support of such schools already established; also grants for school buildings and for technical education.

The receipts and expenditure of the Education Boards, numbering thirteen altogether, are tabulated below, with further particulars:—

RECEIPTS AND EXPENDITURE OF EDUCATION BOARDS, 1909.

	Receipts.	£	s.	d.	£	s.	d.
Net balance, 1st January, 1901..	..	..	..	..	78,144	3	1
Salaries of teachers, and salaries and allowances of pupil-teachers:—							
Revenue from reserves	..	57,282	3	6			
Balance of amount paid from Consolidated Fund	..	497,333	8	1			
					554,615	11	7
Teachers' house allowances	..				13,486	16	10
Allowance (£250) and capitation for general purposes	..				80,733	19	7
Free school-books	..				1,369	7	1
Conveyance and board of school-children	..				2,889	6	9
Special capitation (9d. on average attendance) for School Committees	..				4,752	2	0
Training colleges	..				22,715	2	10
Refunds	..				59	18	7
Secondary education,—							
Scholarships—							
Boards	£8,119	13	9				
National	2,551	11	5				
				10,671	5	2	
District high schools—							
Salaries	17,432	2	11				
Subsidies	1,236	4	7				
	18,668	7	6				
* Fees from pupils	293	15	0				
* Voluntary contributions	1,309	14	10				
				20,271	17	4	
* Payments by High School Boards to Education Boards	..	300	0	0			
* Special scholarships	..	245	0	0			
					31,488	2	6
Manual and technical,—							
School classes, capitation	..	17,762	15	1			
Special and associated classes—							
Capitation	15,483	2	2				
Grants for material	1,216	11	11				
Subsidies on voluntary contributions and bequests	5,441	10	10				
	22,141	4	11				
* Fees from pupils	4,161	6	7				
* Voluntary contributions and bequests	3,521	15	5				
Free-place holders	6,145	3	7				
Training of teachers	2,465	0	0				
				38,434	10	6	
					56,197	5	7

		£	s.	d.	£	s.	d.
Buildings,—							
Maintenance and rebuilding (ordinary)	£13,084 0 7						
Additional towards rebuilding schools destroyed by fire ..	8,354 5 11						
		21,438	6	6			
Rents of buildings used for school purposes, and of sites for schools		2,021	5	6			
New buildings—							
Elementary public schools ..	£56,307 8 0						
Technical-school buildings ..	13,849 13 11						
* Contributions towards cost of buildings	577 16 6						
		70,734	18	5			
					94,194	10	5
* Sales of buildings		1,783	2	3			
* Rents of sites and buildings ..		1,106	13	11			
* Interest on fixed deposits, £1,484 12s. 6d.; truancy fines, £216 4s. 10d.		1,700	17	4			
* Refunds and minor receipts		1,723	4	8			
					6,313	18	2
* Sales of sites					2,217	3	1

Summary of Receipts.

Balance 1st January, 1909 ..	78,144 3 1						
Revenue from reserves	57,282 3 6						
From Government	794,810 11 11						
From other sources (items marked " * ")	18,940 9 7						
Total	949,177 8 1				949,177	8	1

Expenditure.

		£	s.	d.	£	s.	d.
Board's administration		42,299	18	10			
Incidental expenses of schools		35,622	0	2			
Teachers' and pupil-teachers' salaries, and pupil-teachers' lodging-allowance		553,957	17	11			
Salaries of relieving-teachers		3,549	0	5			
Teachers' house allowance		13,659	8	7			
Free school-books		1,722	6	6			
Conveyance and board of children		2,961	7	1			
Special capitation		4,752	5	0			
Training colleges		22,425	2	8			
Refunds and sundries		1,413	4	11			
Secondary education,—							
Scholarships—							
Board	£8,693 19 9						
National	2,782 11 8						
		11,476	11	5			
District high schools—							
Salaries	17,782 9 9						
Subsidies	1,157 19 9						
Other expenses	1,534 9 5						
		20,474	18	11			
Special scholarships		240	0	0			
					32,191		

Manual and technical—				£	s.	d.	£	s.	d.	
School classes	..	..	..	16,363	5	6				
Special and associated classes (including training of teachers)	..	..	..	29,617	17	5				
Direction and administration	..	..	..	1,945	7	11				
							47,926	10	10	
Buildings,—										
Maintenance and replacement (including rebuilding of schools destroyed by fire)	..			74,205	9	10				
Rents..	..	..	..	2,856	2	4				
New buildings—										
Elementary public schools				£59,102	4	3				
Technical schools				19,379	4	3				
							78,481	8	6	
Proceeds of sales of buildings, paid to Government							..	155,543	0	8
Land Sales Account,—								140	14	9
Purchase of sites							..	1,015	18	8
Net balance, 31st December, 1909							..	29,997	0	9
Total							..	£949,177	8	1

Excluding the expenditure on buildings and on scholarships and secondary education, the chief items of expenditure in 1908 and 1909 were as follows:—

		1908.	1909.
		£	£
Boards' administration		39,730	42,392
Incidental expenses of schools		38,077	40,452
Teachers' salaries		489,042	554,012
Training colleges		19,949	22,425
Manual and technical instruction		48,212	47,927

The increase in teachers' salaries is due principally to the large increase in the scale introduced by the Education Amendment Act, 1908, which came into operation on the 1st January, 1909; partly also to the improvement in the staffing of schools with thirty-six to forty children in average attendance, sanctioned by the same Act; and partly to the increase in the number of schools. The increase in the cost of the administration by Boards and Committees is probably due mainly to the last-named cause. The slight decrease in the expenditure upon manual and technical instruction must not be taken as indicating a falling-off in the attendance or in the number of classes, which, on the contrary, have grown considerably. It is due probably to the fact that various payments for services rendered during the year were not actually paid by the Boards until the beginning of the present year, 1910.

The proportion of the expenditure by Boards for administration to their whole expenditure and the corresponding proportion of the incidental expenses of schools (through School Committees) for the last five years have been as follows:—

			Boards. Per Cent.	Committees. Per Cent.	Total. Per Cent.
1905	..	..	.. 5.0	5.7	10.7
1906	..	..	.. 4.5	4.8	9.3
1907	..	..	.. 4.7	4.8	9.3
1908	..	..	.. 4.7	4.5	9.2
1909	..	..	.. 4.6	4.4	9.0

On the whole, there is a slight tendency for the proportion of expenditure upon administration by the Education Boards and School Committees to decrease, and this is as it should be, for the cost of administration should not increase proportionately with the number of schools.

MANUAL AND TECHNICAL EDUCATION.

The Education Act provides for public instruction in such subjects of manual training and of art, science, and technology as are set forth in regulations. The Act provides also for the instruction in elementary handwork of pupils attending primary or secondary schools. All classes recognized under the Act are eligible for grants in aid of necessary buildings, equipment, and material, and for capitation, and subsidies of £1 for £1 on voluntary contributions.

During 1909 capitation was paid on attendances at classes for drawing (various branches), painting, modelling, design, wood-carving, architecture, cabinetmaking, carpentry and joinery, plumbing, painters' and decorators' work, mechanical and electrical engineering, practical mathematics and mechanics, surveying, natural and experimental science (various branches), agriculture, dairy-work, wool-sorting, farriery and smithing, modern languages, mathematics, commercial subjects, cookery, laundry-work, dress-making, millinery, tailoring, and vocal music.

The subjects taken up in classes in connection with primary and secondary schools included elementary handwork, drawing, elementary science, experimental and natural science, cookery, woodwork, elementary practical agriculture, dairy-work, swimming and life-saving, first aid and ambulance, needlework, dressmaking, and elementary practical physics and chemistry.

Special annual grants are made to Education Boards for the maintenance of training-classes for teachers in subjects of manual and technical instruction prescribed for school classes.

Provision has also been made for free technical education. Persons complying with the conditions prescribed by the regulations are entitled to hold junior free places at technical schools or classes. These free places are tenable for two years, and may be continued under certain conditions for three years more as senior free places. In order that the substratum on which technical education is based may be sound, it is made a condition of the tenure of junior free places that the holders shall receive instruction in one or more subjects of general instruction, such as English and arithmetic or some other branch of mathematics, in addition to instruction in technical subjects. Holders of senior free places are required to take up definite courses of technical instruction. Two

thousand two hundred students qualified for free technical instruction during the year.

The controlling authorities of classes for manual and technical instruction are Education Boards, governing bodies of secondary schools and university colleges, and, in the case of certain classes in existence prior to 1904, the managers of those classes. School classes, or classes held in connection with primary or secondary schools, are under the control of the Education Boards or of the governing bodies respectively. "Special classes"—that is, continuation classes, and classes for manual or technical instruction—are established and controlled by the same bodies. "College classes" are classes for higher technical instruction established and controlled by the governing body of a university college. Continuation classes and classes for manual and technical instruction may also be established by Borough Councils, County Councils, and other local authorities acting jointly with an Education Board or the governing body of a university college or secondary school; these are called "associated classes," and all bodies contributing thereto may have a voice, according to the share of the cost of maintenance borne by them, in the election of managers for the classes.

In connection with the annual grants made by the Government to university colleges for specialization, the Auckland University College and the Otago University have each established a School of Mines, providing for courses for the university degree of B.Sc. or for the associateship in mining and metallurgy. The Otago University is also establishing a Veterinary School. The Canterbury College has an endowed School of Engineering and Technical Science, providing for courses for the university degree of B.Sc. in mechanical, electrical, or civil engineering, or for the associateship in engineering.

There also are several Schools of Mines located in districts in which mining is actively carried on, and particulars relating to these will be found in the Mining Section of this book.

The Canterbury Agricultural College has an endowment of 62,000 acres of land, of the rental value of £1,500 per annum, and possesses extensive buildings, and an experimental farm of a very complete character. The institution offers an opportunity to acquire a thorough knowledge of the science and practice of agriculture. Two years' residence at the college is accepted by the University of New Zealand as part of the curriculum qualifying for the degree of B.Sc. in agriculture. The college accommodates forty students.

With the view of encouraging attendance at recognized technical schools and classes, arrangements have been made with the Railway Department by which students attending classes registered with the Minister of Education may obtain railway tickets at special rates. Free railway tickets are issued to holders of free places at technical schools, and to public-school teachers attending approved training-classes.

The following is a summary of the expenditure by the Government during the year on manual and technical instruction :—

Capitation,—	£	s.	d.	£	s.	d.
School classes	18,741	17	8			
Technical classes	18,497	12	8			
Free places	6,401	1	6			
				43,640	11	10
Subsidies on voluntary contributions,—						
School classes	431	14	11			
Technical classes	5,764	3	0			
				6,195	17	11
Grants for buildings, equipment, and rent,—						
School classes	2,501	18	8			
Technical classes	17,830	16	9			
Grants for material for technical classes	1,316	17	2			
				21,649	12	7
Railway fares of instructors and students				4,799	18	6
Examinations				646	3	3
Inspection and other expenses				1,051	0	4
Total				£77,983	4	5

The total expenditure by the Government in the way of capitation, subsidies, and grants was—for school classes, £21,675 11s. 3d.; and for technical classes, £49,810 11s. 1d.

The expenditure for the previous year was £21,260 19s. 2d. and £54,163 8s. 6d. respectively.

MANUAL INSTRUCTION IN SCHOOLS.

Instruction was given in about 60 per cent. of the public schools during the year. Some particulars are given below :—

SUBJECTS OF AND NUMBER OF CLASSES FOR MANUAL INSTRUCTION IN PUBLIC SCHOOLS.

Subjects of Instruction.	1908.	1909.
Elementary handwork	2,880	3,178
Woodwork	270	281
Ironwork	..	5
Agriculture and dairy-work	498	559
Elementary science	57	47
Physical measurements	94	101
Cookery	330	339
Laundry-work	..	60
Dressmaking	72	79
Swimming and life-saving	103	136
Physiology and first aid	51	57
Totals	4,355	4,842

The number of public schools in which handwork was taught was	1,240
The number of pupils under instruction was	116,538
The percentage of total roll number under instruction was	76.5
The payments by way of capitation, grants, and subsidies in aid of classes amounted to	£20,536 18s. 8d.
The average cost per pupil was	3s. 6.3d.

The number of specially equipped centres for cookery, laundry-work, woodwork, and ironwork is now about fifty.

Increasing attention continues to be given to instruction in elementary agriculture. School gardens, experimental and observation plots, and, in many cases, suitable laboratory practice, form special features of the instruction, which in several districts is supervised by special itinerant instructors. The increase for the year in the number of classes was sixty-one. Suitable instruction in dairy-work is in many cases included in the course of instruction in agriculture. The total average attendance at classes for agriculture and dairying was 9,184.

It has been felt that the courses of instruction at many of the district high schools, most of which are located in rural districts, have not, for various reasons, been as intimately related to rural pursuits as they should be if the schools are properly to fulfil their functions. With the view of assisting the Education Boards, some of which have for some time past been endeavouring to arrange suitable courses of rural instruction in connection with the secondary departments of district high schools, provision has been made for a special capitation payment of £5 10s. per annum on account of each pupil taking an approved course of agricultural instruction. It is expected that with the aid of the additional funds so provided Education Boards will be enabled to make more satisfactory arrangements for efficient instruction than have hitherto been possible. There are indeed indications already that in several districts fairly full courses will shortly be arranged. In several cases special itinerant instructors have been or are about to be appointed. It may be pointed out that it has been found possible to arrange a course which, besides having a direct bearing on rural pursuits, provides also for the needs of pupils preparing for the Matriculation or Civil Service Junior Examinations. The progress of the proposed schemes will be watched with much interest.

Practical instruction in various branches of elementary science was given to nearly fifty recognized classes. In this connection it may be noted that there are now over twenty well-equipped laboratories available for instruction in science in connection with primary and district high schools. In the case of several of the latter schools laboratory-work forms an important part of the course of agricultural instruction. In schools where laboratories are not yet available, courses in elementary physical measurements such as may conveniently be carried out in ordinary class-rooms are found to afford excellent opportunities for individual practical work. Such courses were taken by about 100 classes. The total average attendances at classes for elementary natural and experimental science was 5,181.

As in previous years, several classes received assistance in the way of voluntary contributions in money and in kind from local bodies, agricultural associations, members of the farming community, and others. Such contributions carry a Government subsidy of £1 for £1. The amount distributed by way of subsidies in 1909 was about £430.

In 1901, the year in which the present scheme of manual instruction may be said to have been inaugurated, very few of the then existing district high schools were provided with any facilities for hand-and-eye or science training.

At the present time over 50 per cent. of the district high schools have been provided with buildings and equipment for the teaching of one or more of the following subjects: Woodwork, ironwork, cookery, physics, and chemistry, with the result that the range of the instruction at these schools has been considerably widened.

Recognized classes for manual instruction were also held during the year at over twenty secondary schools. The subjects of instruction included woodwork (average attendance, 273), cookery (average attendance, 463), dressmaking (average attendance, 170), natural science (average attendance, 841), and experimental science (average attendance, 691). Some particulars relating to the classes are as follows:—

	1908.	1909.
The number of recognized classes for manual instruction in secondary schools was ..	159	189
The capitation on classes amounted to ..	£861 18s. 5d.	£946 3s. 7d.
The average cost per class was	£5 8s. 5d.	£5 0s. 1·5d.

TECHNICAL INSTRUCTION.

Apart from special centres for manual instruction in the larger towns, there are now about forty well-equipped buildings for technical classes. In 1901 when the Act came into force the number was twelve. The system of providing instruction in rural subcentres by means of itinerent instructors continues to work well in the districts in which it is in operation. In Auckland classes conducted on this system were held at nine, and in Wanganui at thirty-three, centres. The number of recognized technical and continuation classes in operation during the year was over 1,700, an increase of 200; of these, 152 were continuation classes. This latter number does not, however, include a large number of continuation classes included in approved courses of commercial instruction recognized under the regulations as courses of technical instruction. The number of centres at which classes were held was over 100.

The following are some particulars relating to technical classes in operation during 1909:—

The number of places at which recognized technical classes were held was	110
The number of recognized classes was	1,702
The total number of individual students was	14,137
The average attendance at all classes was	23,070
The capitation on attendance was	£18,497 12s. 8d.
The rate of capitation per unit of average attendance was ..	16s. 0·4d.

The classes were divided as follows :—

Classes.	Number of Centres.		Number of Classes.		Average Attendance.	
	1908.	1909.	1908.	1909.	1908.	1909.
"Special" classes ..	98	89	854	858	11,016	10,287
"Associated" classes ..	23	26	520	712	9,002	11,250
"College" classes ..	1	1	131	132	1,500	1,533
Totals ..	122	116	1,505	1,702	21,518	23,070

It will be noticed that "special" classes, as last year, were the most numerous and the most widely distributed. The number of "associated" classes and the number of centres at which they are held have increased. These classes had an average attendance of 15·8 per class, as against 12 in the case of "special" classes. The increase (192) in the number of "associated" classes may be regarded as an index of the continued interest taken in technical instruction by local bodies, industrial associations, and other similar organizations. "College" classes were conducted by one only, as heretofore, of the University colleges—namely, Canterbury College, Christchurch. There are, however, indications that certain classes conducted by one or more of the other colleges will shortly be brought under the regulations.

The Science and Art Examinations of the English Board of Education, and the Technological Examinations of the City and Guilds of London Institute, were held as usual, the former at fifteen, the latter at seventeen, centres. The number of entries for the Science and Art Examinations was 781, the number of passes being 501; while for the Technological Examinations the number of entries was 437, and the number of passes 268. Although the time, May to July, at which these examinations require to be held is not altogether convenient from the point of view of the schools, the number of separate subjects in which candidates are examined increases from year to year, and likewise the number of centres from which candidates are drawn continue to increase. The percentage of failures in New Zealand is less than in England, though a smaller proportion of colonial students qualify in the honours grade.

SECONDARY EDUCATION.

There were 31 subsidized or endowed schools of higher education in December, 1909. The names of these secondary schools, with the numbers of pupils on the rolls in the last term or quarter of the year, and the fees charged, are stated further on. These schools must not be confused with the district high schools, although they nearly all admit to free places holders of Education Board Scholarships and of National Scholarships, besides all who gain certificates of proficiency within prescribed limits of age, &c.

The total number of pupils attending the thirty-one secondary schools in the last terms of 1908 and 1909 respectively were as follows :—

	1908.			1909.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Roll (exclusive of lower departments)	2,502	1,678	4,180	2,797	1,870	4,667
Number in lower departments	88	59	147	114	75	189
Total	2,590	1,737	4,327	2,911	1,945	4,856

Number of boarders (included above) .. 557 136 693 566 140 706

In the same years these schools were staffed as follows :—

	1908.			1909.		
	M.	F.	Total.	M.	F.	Total.
Regular staff	125	91	216	131	93	224
Part-time teachers	43	25	68	44	33	77

The average number of pupils per teacher (excluding part-time teachers) is thus seen to have been 20 in 1908, and 21·7 in 1909.

The average number of pupils on the roll of the secondary departments of district high schools in the two years 1908-9 respectively were—

	1908.			1909.		
	Boys	Girls	Total	Boys	Girls	Total
Boys	1,167			1,100		
Girls		1,191			1,063	
Total	2,358			2,163		

If, instead of taking the average roll throughout the year, take, as for the secondary schools, at the end of the year, the numbers are found in the secondary departments of district high schools to have been as follows :—

	1908.			1909.		
	Boys	Girls	Total	Boys	Girls	Total
Boys	1,017			944		
Girls		1,125			947	
Total	2,142			1,891		

Both in the secondary schools and in the secondary departments of district high schools there is a falling-off in the roll towards the end of the year; but the decrease is less marked in the secondary departments than in the secondary schools of the district high schools: in the latter the total roll at the end of the year was 2,142 in 1908 and 1,891 in 1909. The falling-off in the course of the year is more marked in the case of the boys than of the girls: this is due, no doubt, to the fact that more boys leave school to enter employment.

Besides the head teachers, who generally take some part in the secondary instruction, there were employed in 1908 in the secondary departments of district high schools 102 special assistants—55 men and 47 women—and last year 93 special assistants—namely, 43 men and 50 women. The average number of pupils per teacher was 23·1 in 1908 and 23·3 in 1909.

In addition to those in secondary schools and in the secondary departments of district high schools there should properly be included in the number of pupils under secondary instruction in the Dominion (a) the pupils attending certain day classes in con

nection with technical schools, which in this regard may be called technical high schools: and (b) the pupils in various institutions for the secondary education of Maori boys and girls.

The total numbers on the roll of technical day schools at any time during the years 1908 and 1909 were as follows:—

					1908.	1909.
Boys	..	..	..	..	307	345
Girls	..	..	..	..	392	501
Totals	..	..	..	..	699	846

The following was the average roll of pupils in secondary schools for Maoris (all of whom were boarders) for the respective years:—

					1908.	1909.
Boys	..	..	..	..	136	169
Girls	..	..	..	..	167	191
Totals	..	..	..	..	303	360

Summarizing all these figures, substituting in the case of the secondary schools the average roll for the roll at the end of the year, and excluding pupils in the lower departments of such schools, we obtain the following statement of the numbers receiving some form or other of secondary instruction during the year 1909 (as nearly as can be estimated):—

Secondary schools ..	..	..	..	..	4,834
District high schools ..	..	..	..	..	2,163
Technical day schools ..	..	..	..	..	846
Maori secondary schools ..	..	..	..	..	360
Total ..	..	..	..	..	8,203

The corresponding estimated total for 1908 would be 7,742, so that the decrease in the number of secondary pupils at district high schools has been more than balanced by the increases in the three other groups of schools giving secondary instruction, the total net increase being about 460. The population of the Dominion (exclusive of the Cook Islands) was estimated at 1,008,373 at the 31st December, 1908, so that the proportion of persons receiving some form of secondary instruction in publicly recognized institutions during 1909 was thus 81·4 per 10,000 of the population. In 1906 the corresponding proportion was 72·7 per 10,000, so that there has been a considerable development of secondary education in the Dominion during the three years 1906–9. It may be interesting to note that in Württemberg (a typical German State), New York, and Chicago the latest available figures (1905–6) show the corresponding proportions to have been respectively 71·6, 51·8, 66·8 per 10,000 of the population; while in Switzerland the proportion reaches the astonishingly high standard of 203·1 per 10,000.

FREE SECONDARY EDUCATION.

Under the regulations for free places at secondary schools and district high schools, free places in such schools are divided into two series, junior and senior, the former being tenable for two

years with a possible extension to a third year without further examination, or, in the case of district high schools, to the age of seventeen, the latter to the age of nineteen. No junior free place at a secondary school or district high school is tenable beyond the age of seventeen. Boys and girls who qualify for Junior Scholarships, whether they obtain scholarships or not, are entitled to junior free places, and all who pass the special examination for free places are also participants in the privilege. Junior free places may again be obtained on the qualification of a certificate of proficiency—that is, essentially pupils who pass with credit the Sixth Standard of the public-school syllabus; but on this qualification the age of a candidate seeking admission as a free pupil for secondary instruction must not exceed fifteen years.

A senior free place is tenable by any pupil who has passed the Civil Service Junior Examination or the Intermediate Examination, the latter of which is regarded as the special examination for senior free places.

Both examinations are conducted together, and differ mainly in the fact that in the latter case different papers are set in certain subjects to suit the requirements of non-competitive candidates.

Those who have passed the matriculation examination of the University are also treated as holders of a senior free place. In a largely increasing number of cases, however, senior free places are now obtainable without the intervention of any external examination. By a recent amendment in the regulations, the Minister of Education is empowered to award senior free places to eligible pupils who have satisfactorily completed a secondary course of two years' work in accordance with the specified conditions, and are recommended therefor by the Principal of the school attended, or in the case of district high schools by an Inspector of the district, in either case concurrence by the Inspector-General of Schools in the recommendation being acquired. In December, 1909, 351 senior free places in secondary schools and district high schools were granted in this way.

On free places granted in secondary schools to duly qualified pupils statutory grants are payable on a sliding scale, in which the capitation amounts vary according to the income of the school from public endowments, and are calculated in such a way as to secure to the school for each free pupil under instruction an annual income from public sources sufficient to cover the necessary expenditure.

At the end of 1909 the secondary schools giving free tuition to duly qualified pupils, and receiving grants therefor under the Act, were twenty-eight, as against twenty-seven for the preceding year. The total number of pupils on the roll of these twenty-eight schools, exclusive of pupils in the lower departments of the schools, was 4,088, and out of this total, 3,295, or 81 per cent., were given free places under the regulations. The total annual payment at the rate paid for the last term of the year would be approximately £34,629 :

the approximate average cost to the Treasury was therefore £10 10s. 2d. per pupil.

In addition, free tuition was given to 157 others who were holders of scholarships or of exhibitions granted by these schools, or by endowed secondary schools not coming under the conditions for free places, making the total number of free places held at secondary schools 3,452, or 74 per cent. of the roll of all these schools. At the same time the pupils in attendance at the secondary classes of district high schools were 1,891 in number, all but a very few of whom were free pupils, receiving free tuition at an average cost to the Government of £9 16s. 10d. per pupil. Further, in reckoning the amount of free secondary education in the Dominion, there have to be added those receiving free education in Maori secondary schools, 124 in number, and the holders of certain free places in technical schools, numbering 846. There is thus an approximate total of 6,313 pupils receiving free secondary education, exclusive of those holders of free places in technical schools who were art students or were evening students, or were taking courses which may be more approximately described as technical rather than as secondary.

The following table gives a summary of the various secondary free places at the end of the year for which payment was made by Government:—

FREE PLACES IN DECEMBER, 1908 AND 1909.

	1908			1909		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
(i.) Secondary schools—						
(a.) Junior free pupils	1,083	839	1,922	1,326	1,004	2,330
(b.) Senior free pupils	479	346	825	571	394	965
Total	1,562	1,185	2,747	1,897	1,398	3,295
(ii.) District high schools	1,017	1,125	2,142	944	947	1,891
(iii.) Maori secondary schools	43	65	108	51	73	124
(iv.) Technical day-schools	307	392	699	345	501	846
Grand total ..	2,929	2,767	5,696	3,237	2,919	6,156

In the above table (in the case of the secondary schools and district high schools) the roll at the end of the year has been taken; a fairer estimate of the number of persons receiving free secondary education in public institutions would be obtained by taking the average roll throughout the year and including in the total the holders of foundation and private scholarships or exhibitions who received free tuition not paid for by Government. We obtain thus the following approximate figures:—

NUMBER RECEIVING FREE SECONDARY EDUCATION IN 1909.

Secondary schools	..	..	..	..	3,615
District high schools	..	..	..	..	2,163
Technical day-schools	..	..	..	..	846
Maori secondary schools	..	..	..	..	124
Total	..	..	..	..	6,748

The corresponding number for 1908 may be estimated at 6,244, showing an increase for the year 1909 of about 500 in the number in the Dominion who are receiving free secondary education.

Rangiora High School	..	21	20	2	43	..	19	8	..	27	..	..	..	9	9	0	..
Ashburton High School	..	23	34	2	59	..	21	34	1	56	..	..	..	6	6	0	..
Timaru Boys' High School	..	20	48	4	72	..	..	..	..	..	..	9	..	9	0	0	45 0 0
Girls' High School	..	..	..	..	..	..	20	36	4	60	..	..	..	9	0	0	..
Waitaki Boys' High School	..	5	77	94	15	191	..	..	..	..	25	..	137	7	10	0	46 1 0
Girls' High School	..	..	..	..	..	..	..	15	31	5	..	..	..	7	10	0	..
Otago Boys' High School	..	79	176	6	261	..	..	12	166	4	182	..	..	10	0	0	43 10 0
Girls' High School	..	..	..	..	..	..	..	..	..	..	..	..	..	10	0	0	..
Southland Boys' High School	..	52	89	5	146	..	..	..	..	..	..	..	..	10	0	0	..
Girls' High School	..	..	..	..	..	..	47	87	5	139	..	..	..	10	0	0	..
Total	..	40	787	1,378	105	2,310	34	577	1140	68	1,819	114	75	346	140	..	..

B. Secondary Schools established under Section 94 of the Education Act.

Palmerston North High School	1	52	47	1	101	..	29	27	1	7	..	..	15	..	..	10	0	0	41	19	0
Dannevirke High School	..	14	35	5	54	..	18	18	1	37	..	..	..	..	..	10	0	0	..	..	..
Gore High School	..	17	23	2	42	..	11	19	2	32	..	..	..	..	..	10	0	0	..	..	..
Total	1	83	105	8	197	..	58	64	4	126	..	..	15	..	..	..	..	..	..	..	..

C. Endowed Secondary Schools not coming within the Definition of Section 89 of the Education Act.

Wanganui Collegiate School	1	50	99	18	168	..	..	..	..	..	..	..	131	..	..	12	0	0	51	0	0
Christ's College Grammar School	58	89	84	5	236	..	..	..	..	..	..	..	74	..	..	7	17	6	42	0	0
																11	0	6	45	0	0
																14	3	6			
Total	59	139	183	23	404	..	..	..	..	..	..	..	205	..	..	..	..	..	..	..	..
Grand total for 1909	100	1009	1,666	136	2,911	34	635	1204	72	1,945	114	75	566	140	..	..	..	..	..	..	..
Grand total for 1908	84	879	1,522	105	2,590	32	642	965	98	1,737	88	59	557	136	..	..	..	..	..	..	..
Difference	16	130	144	31	321	2	*7	239	*26	208	26	16	9	4	..	..	..	..	..	..	..

* Minus.

STAFF AND SALARIES OF SECONDARY SCHOOLS AS IN DECEMBER, 1909.*

Schools.	Staff.				Salaries at Rate paid at End of Year.				Notes.
	Regular.		Part-time.		Regular Staff.		Part-time Teachers.		
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
A. Endowed Schools included in the Eighth Schedule to the Education Act.									
Whangarei High School	2	1	1	2	£ 480	£ 120	£ 15	£ 110	
Auckland Boys' Grammar School	12	..	2	..	3,694	..	200	..	
" Girls' Grammar School	..	10	1	4	..	1,810	72	..	Part-time teachers receive fees. Principal has residence.
Thames High School	2	1	1	..	500	150	..	..	Part-time teachers receive fees. Principal has residence.
New Plymouth High School	3	2	2	..	730	390	55	..	Principal has residence.
Wanganui Girls' College	..	11	1	6	..	2,195	130	140	Principal has residence. Part-time teachers receive fees.
Wellington Boys' College	19	..	4	..	4,555	..	80	..	
" Girls' College	..	9	2	2	..	1,765	85	65	
Napier Boys' High School	8	..	..	..	1,627	..	..	..	Including £52 house allowance for second master; also Principal has residence, and two assistant masters have board.
" Girls' High School	..	7	..	1	..	1,135	..	30	Principal has residence.
Gisborne High School..	3	1	1	1	705	150	..	..	Including £55 house allowance for Principal and first master. Part-time teachers receive fees.
Marlborough High School	2	2	..	..	650	310	..	..	Principal has residence.
Nelson Boys' College	8	..	2	..	1,925	..	100	..	Principal has board and residence, four assistants have board, and one assistant has residence.
" Girls' College	..	8	..	2	..	1,080	..	75	Principal and five assistants have board and residence.
Christchurch Boys' High School..	10	..	6	1	3,220	..	475	10	
" Girls' High School..	..	10	1	7	..	1,695	45	410	

Rangiora High School ..	1	2	2	..	400	282	9	..	Principal has residence.
Ashburton High School ..	2	2	..	..	650	330	..	..	
Timaru Boys' High School	4	3	3	..	1,260	..	38	..	
Girls' High School	..	4	..	1	..	810	..	15	
Waitaki Boys' High School	7	..	1	1	1,666	..	15	36	Five assistants have board and residence.
Girls' High School	..	3	1	1	..	575	10	50	
Otago Boys' High School	11	..	3	..	3,228	..	160	..	Principal has residence.
Girls' High School	..	9	2	2	..	1,685	100	60	Part-time teachers receive fees.
Southland Boys' High School	6	..	3	..	1,544	..	103	..	Principal has residence.
Girls' High School	..	6	2	1	..	1,000	77	15	
Total ..	100	88	41	32	26,884	16,482	1,769	1,016	

B. Secondary Schools established under Section 94 of the Education Act.

Palmerston North High School ..	4	2	2	1	1,150	290	50	..	Including £100 house allowance for Principal. Part-time teachers receive fees.
Dannevirke High School	2	2	1	1	570	360	15	20	
Gore High School ..	2	1	..	..	575	150	..	..	
Total ..	8	5	3	2	2,295	800	65	20	

C. Endowed Secondary Schools not coming within the Definition of Section 89 of the Education Act.

Wanganui Collegiate School ..	11	..	1	..	2,950	..	60	..	Four assistants have board.
Christ's College Grammar School	12	..	4	..	3,270	..	260	..	Five assistants have residence
Total ..	23	..	5	..	6,220	..	320	..	
Grand total ..	131	93	49	34	35,399	16,282	2,154	1,036	

* In four cases no secondary school has been maintained by the governing body: these are the Greymouth High School, Hokitika High School, Akaroa High School, Waimate High School; but in all cases the funds are applied, in whole or in part, to the establishment of scholarships or in aid of local district high schools or other secondary schools.

FINANCES OF SECONDARY SCHOOLS.

The income of secondary schools is derived from the following sources :—

- (i.) Rents from the special land reserves allocated to them by statute ;
- (ii.) Statutory grants, given in lieu of special land reserves ;
- (iii.) Income from the secondary-school land reserves controlled by the School Commissioners, divided among the secondary schools in the several land districts in proportion to the number of pupils, exclusive of lower departments ;
- (iv.) Interest upon moneys derived from the sale of reserves, and invested in accordance with the Education Reserves Act ;
- (v.) Statutory capitation upon the free pupils under the Act ;
- (vi.) Capitation on pupils in classes recognized under the Manual and Technical Instruction Regulations ;
- (vii.) Special grants from Government for buildings and apparatus ;
- (viii.) Statutory subsidies on voluntary contributions ;
- (ix.) Tuition fees of pupils ;
- (x.) Boarding fees of pupils ;
- (xi.) Miscellaneous sources, such as interest on moneys other than those obtained by the sale of reserves, donations, and special endowments (for scholarships, prizes, &c.), rent of premises, &c.

The revenue derived from the sources (i) to (iv) is the income derived from endowments, and the "net annual income derived from endowments" is the average for the three preceding years of this revenue, less the expenditure upon the endowments and investments and upon buildings, and less mortgage and other charges.

The following table gives a summary of the receipts under the several heads named above, and of the various items of expenditure for the year :—

SUMMARY OF THE ACCOUNTS OF INCOME AND EXPENDITURE FOR 1909 FURNISHED BY THE GOVERNING BODIES OF SECONDARY SCHOOLS.

<i>Receipts.</i>				<i>Expenditure.</i>			
	£	s.	d.		£	s.	d.
Credit balances on 1st January, 1909	25,937	17	9	Liabilities on 1st January, 1909 ...	6,627	14	6
Endowment reserves sold and mortgage moneys repaid ...	1,064	12	5	Expenses of management ...	3,636	18	3
Rents, &c., of reserves ...	30,704	10	2	School salaries ...	56,493	12	8
Interest on moneys invested ...	2,307	10	7	Boarding-school accounts ...	14,663	7	6
Reserves Commissioners' payments ...	4,066	7	4	Scholarships and prizes ...	2,234	0	4
Government payments—				Printing, stationery, fuel, light, &c. ...	4,092	11	10
For manual instruction ...	900	15	9	Buildings, furniture, insurance, rent, and rates ...	41,911	7	2
For free places ...	33,489	14	8	On endowments ...	2,249	19	5
Subsidy on voluntary contributions ...	346	8	11	On manual instruction ...	953	10	7
Grants for buildings, sites, furniture, &c. ...	4,746	6	10	Interest ...	2,044	11	10
Statutory grant (Marlborough High School) ...	400	0	0	Examination expenses ...	235	18	4
Technical instruction—				Repayment of loans ...	800	0	0
Government payments ...	6,521	6	0	Payments of High School Boards to Education Boards ...	300	0	0
From other sources ...	1,353	13	4	Sundries not classified ...	3,239	2	0
School fees (tuition) ...	18,887	8	5	On technical instruction ...	7,793	5	8
Boarding-school fees ...	17,715	9	5	Credit balances, 31st December, 1909 ...	22,793	8	5
Books, &c., sold, and refunds ...	209	10	5				
Borrowed on loan ...	5,850	0	0				
Special voluntary contributions, bequests, and local subsidies ...	6,684	12	5				
Sundries not classified ...	1,350	16	7				
Debit balances, 31st December, 1909 ...	7,532	7	6				
	<u>£170,069</u>	<u>8</u>	<u>6</u>		<u>£170,069</u>	<u>8</u>	<u>6</u>

It may be as well to compare the chief items of income and expenditure in 1908 and 1909:—

	1908. £	1909. £
Income from reserves and endowments	36,774	37,478
Grants from Government (exclusive of building grants)	29,108	41,258
Building grants	16,164	4,746
Tuition fees	19,160	18,887
Salaries of staff	52,340	56,494
Expenses of management	3,412	3,637
Buildings, &c.	40,103	41,911

As the free-place system is extended, the amount received in tuition fees will naturally diminish, and the capitation grants from Government will increase.

The Education Amendment Act of 1908, by the introduction of a higher scale of capitation on free pupils, benefits not only those secondary schools which have few if any endowments, but also the more numerous class of schools whose income from endowments is small in proportion to the number of pupils; further, it will relieve from anxiety those schools where a necessity arises for a large building expenditure in any year, as the effect of the new sliding scale is that in any year the total of the net annual income from endowments and the capitation—that is, of the moneys available for the payment of staff salaries and working-expenses—cannot, with due safeguards, fall below £12 10s. per pupil—a sum which past experience shows to be just sufficient. Generally speaking, the finances of the secondary schools are in a sound condition, notwithstanding the large expenditure under the head of buildings: indeed, it would be as well if the governing bodies of many of the schools would consider carefully the need for increasing the staffs of their schools, and of giving greater encouragement in the form of increased salaries to assistant teachers. At present there is no doubt that in many cases the salaries paid to assistants are far too low. Efficient work cannot reasonably be looked for in a secondary school unless the staff is sufficient and well paid.

For the whole Dominion, if there are taken into account only the secondary schools that admit free pupils under the Act, we find the following position:—

Total number of pupils, excluding lower departments ..	4,421
Total net income from endowments (average of three years ending 31st December, 1908)	£11,775
Net income from endowments per head	£2.66
Approximate annual rate of capitation	£10.40
Total available net income per free pupil for salaries and management	£13.06

scientific principles upon which the successful practice of these pursuits depends. Similarly, the course for girls is intended to fit them for the work which they, as members of families engaged in such pursuits, may have to perform or superintend. It is worthy of remark that in most instances it has been found possible, not only to provide reasonably full courses with a distinct bias towards rural and domestic pursuits, but also to secure adequate opportunities for pupils preparing for the various public examinations. The special payment of £5 10s. per annum provided by the Government for each pupil in the secondary department of a district high school taking an approved rural course has enabled Education Boards to augment the available teaching-staff by the addition thereto of specially qualified itinerant instructors to teach the significant subjects included in the course.

While it is too early yet to judge of the effect of this departure from old-fashioned methods of secondary education, it will be a matter for surprise if it is not found to be altogether beneficial from the point of view both of the schools and of the pupils. It should at least have the effect of prolonging the period of secondary education in rural districts.

A table is given showing the number of qualified pupils attending these district high schools on the 31st December, 1909.

NEW ZEALAND UNIVERSITY.

The introduction of university education into New Zealand was effected by the Superintendent and Provincial Council of Otago, who in 1869 passed an Ordinance under which the University of Otago was established. Following closely on the founding of this institution was the establishment of the University of New Zealand under an Act of the General Assembly, the New Zealand University Act, 1870. This University subsequently received a Royal charter, whereby the degrees which it confers are declared entitled to "rank, precedence, and consideration" throughout the British Empire "as fully as if the said degrees had been conferred by any university of the United Kingdom." It was apparently contemplated by Parliament (*vide* section 19 of the Act last quoted) that the New Zealand University and the Otago University should be amalgamated; but the negotiations for this purpose having failed, the two institutions remained for some time distinct bodies. In the year 1874, however, the University of Otago surrendered or put in abeyance its power of conferring degrees, and became affiliated to the University of New Zealand, and at the same time it was stipulated that the University of New Zealand should not directly exercise functions of teaching.

The New Zealand University Act, 1874, which repealed the statute of 1870, gave power to the Senate to confer, after examination, the several degrees of Bachelor and Master in Arts, Bachelor and Doctor in Law, Science, Medicine, Music, and also in such other departments of knowledge, except theology, as might be determined by the said Senate in the future.

By statute passed in 1904 further powers were given to confer the degrees of Doctor of Literature; Master of Laws; Master of Surgery; Master of Science; and Bachelor, Master, and Doctor of (a) Veterinary Science, (b) Dental Surgery, (c) Engineering (Mechanical, Electrical, Civil, Mining, Metallurgical, Naval Architecture); (d) Agriculture, (e) Public Health, (f) Commerce.

Powers are granted to confer also *ad eundem* degrees.

In 1902 an Amendment Act was passed reconstituting the Senate, which now consists of twenty-four members or Fellows, five to be elected by each of the four University College districts—that is to say, two by each governing body, two by each District Court of Convocation, and one by each Professorial Board. The remaining four members are nominated by the Governor in Council.

The statutes relating to the New Zealand University have been consolidated under the New Zealand University Act, 1908.

In the year 1873 the Superintendent and Provincial Council of Canterbury passed an Ordinance for founding "The Canterbury College," and the college was accordingly established with the same standard of university education as that of the University of Otago, but without the power of conferring degrees. It was affiliated to the University of New Zealand.

In December, 1878, a Royal Commission on University and Secondary Education was appointed by the Governor, which met in July, 1879, and reported that two colleges, with an income of £4,000 each, ought to be established in Auckland and Wellington, and that suitable buildings, at a cost of £12,500 each, should be erected in those cities. In the following year the Royal Commission repeated these recommendations.

The Auckland University College Act, 1882, which became law on the 13th September in that year, definitely established the college, and endowed it with a statutory grant of £4,000 per annum. By the Auckland University College Reserves Act, 1885, three blocks of land, containing about 10,000 acres each, and a block containing about 354 acres, which had been devoted to the purpose of promoting higher education in the Province of Auckland, became vested in the Council of the University College.

The Auckland University College was affiliated to the University of New Zealand by the Senate of the University on the 6th March, 1883, and on the 21st May in the same year the college was opened by the Governor.

Nothing was done for Wellington until the year 1894, when an Act was passed entitled the Middle District of New Zealand University College Act, 1894, which said, "There shall be established in the City of Wellington a college to be connected with the University of New Zealand," and provision was made for a governing body to be called the Council, but no provision was made for any pecuniary grant nor any endowment, and, though certain members of the Council were appointed, nothing could be done for want of funds.

Not until 1897 were the needs of Wellington actually attended to. In the session of Parliament of that year the late Right Hon. Mr. Seddon, P.C., then Premier, introduced the Victoria College Act: an Act, as stated in the preamble, "to promote higher education by the establishment of a college at Wellington in commemoration of the sixtieth year of the reign of Her Majesty Queen Victoria," the college being intended to embrace in its work the Provincial Districts of Wellington, Taranaki, Hawke's Bay, Nelson, Marlborough, and Westland. The Act was passed on the 22nd December, 1897, and the Council was formed as provided in the Act, and the work of organization was begun. The Act provides for the payment out of the Consolidated Fund of a grant of £4,000 a year, and also requires the Council to give six scholarships each year, called "Queen's Scholarships," to persons of either sex under the age of fourteen years, upon the results of an examination under such conditions as the Council may provide. The Act further sets apart a parcel of land 4,000 acres in extent in the Nukumarū Survey District (Wellington Provincial District) as an endowment for the College.

The Council of the College has established ten chairs: classics, English, mathematics and mathematical physics, chemistry, physics,

biology, law (two), modern languages, and mental science; and lectureships in education, political economy, and geology. It is intended as funds allow to add other subjects.

The New Zealand University is not a teaching body, as above explained, undergraduates hitherto for the most part keeping their terms at one or other of the affiliated institutions—the Auckland University College, the Victoria College, the Canterbury College, and the University of Otago—each of which has now a staff of professors and lecturers. On the 20th May, 1910, the number of graduates who had obtained direct degrees was 1,424.

The number of undergraduates on the roll of the University on 1st June, 1910, was 4,869 (exclusive of such as had not performed any academical act for a period of ten years), but only 1,832 were keeping terms (not including undergraduates who had not, in the last three years, entered at a college or come up for any college or university examination), of whom 1,118 were males and 714 females. One hundred and twenty-nine of the males and ten of the females were medical students. The numbers of students at the affiliated institutions during the year 1909 were as follow: At the Auckland University College, 237 matriculated and 167 non-matriculated; at Canterbury College, 321 matriculated and 79 non-matriculated; at the Otago University, 367 matriculated and 54 non-matriculated. The Victoria College, before mentioned, affords further facilities for university students, and in 1909 had a total of 466 students on the roll—380 matriculated and 86 non-matriculated.

The names of the officers forming the controlling body of the New Zealand University on 1st May, 1911, are:—

VISITOR.

His Excellency the Governor.

UNIVERSITY OFFICERS.

Chancellor, Sir Robert Stout, K.C.M.G., C.J.

Vice-Chancellor, Sir Charles Christopher Bowen, Kt.

Registrar, Barclay Hector.

Assistant-Registrar, Edwin Thomas Norris, M.A.

Office: Wellington.

THE SENATE.

James Allen, M.A., Cantab.

Sir Charles Christopher Bowen, Kt.

Frederick Douglas Brown, M.A., B.Sc.,
Oxon.

John Macmillan Brown, M.A., Glasg.

The Reverend Andrew Cameron, B.A.,
N.Z.

James Hay, M.A., LL.B., N.Z.

George Hogben, M.A., Cantab.

William Chisholm Wilson McDowell,
B.A., N.Z.; M.B., C.M., Edin.

Sir George Maurice O'Rorke, Kt., M.A.,
LL.D., Dublin.

The Reverend William Salmond, M.A.,
D.D., Edin.

John Halliday Scott, M.D., Edin.,
M.R.C.S., Eng.; F.R.S.E.

Charles Chilton, M.A., D.Sc., N.Z.;
M.B., C.M., Edin.; F.L.S.

Louis Cohen, M.A., N.Z.

William Edward Collins, M.B., Lond.;
M.R.C.S., Eng.

THE SENATE—*continued.*

Thomas Hill Esterfield, M.A., Cantab., Ph.D., Wurtz., F.I.C., F.C.S.	John Shand, M.A., LL.D., Aberd. Sir Robert Stout, K.C.M.G.
The Reverend William Albert Evans.	James William Tibbs, M.A., Oxford.
Frederick Fitchett, M.A., LL.D., N.Z.	Joseph Augustus Tole, B.A., LL.B., Sydney.
Henry Andrew Gordon, F.G.S., A.M.I.C.E.	Heinrich Ferdinand von Haast, M.A., LL.B., N.Z.
Robert Julian Scott, M.Inst.C.E., M.Inst.M.E., A.A.I.E.E.	

PRIVATE AND DENOMINATIONAL SCHOOLS.

There were 306 private schools at the end of 1909, a decrease of 1 on the number in 1908: 30 were for boys, 51 for girls, and 225 for children of both sexes. The number of pupils attending them was 17,930—namely, 7,597 boys and 10,333 girls, not counting 59 Maoris, 23 boys and 36 girls. The number of European pupils at these schools was greater than in 1908 by 437. Of the private schools, 150 were Roman Catholic, with an attendance of 12,611 pupils.

The following gives, for the past ten years, the number of private schools and of Europeans attending them, the number of Roman Catholic schools and pupils being also shown separately:—

Year.	Number of Private Schools.	Pupils.			Included in Previous Numbers.	
		Boys.	Girls.	Totals.	Roman Catholic Schools.	Pupils at Roman Catholic Schools.
1900	304	6,152	9,403	15,555	132	10,687
1901	309	6,244	9,100	15,344	129	10,448
1902	297	6,451	9,173	15,624	139	10,802
1903	288	6,405	9,204	15,609	139	10,812
1904	295	6,785	9,593	16,378	149	11,373
1905	291	6,837	9,802	16,639	146	11,738
1906	308	7,026	10,105	17,131	154	11,948
1907	302	7,510	10,578	18,088	152	12,650
1908	307	7,653	10,714	18,367	149	12,538
1909	306	7,597	10,333	17,930	150	12,611

The distribution of the private schools in the various provincial districts is shown on the next page.

PRIVATE AND DENOMINATIONAL SCHOOLS, 1909.—SUMMARY BY PROVINCIAL DISTRICTS.

Provincial Districts.	Number of Schools.			Number of Teachers.			Number of Scholars (exclusive of Maoris).		Daily Average Attendance.	
	Boys.	Girls.	Mixed.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Auckland	6	7	57	70	31	173	204	1,876	2,562	4,428
Taranaki	...	3	14	17	...	38	38	410	564	974
Hawke's Bay	4	4	12	20	10	49	59	441	584	1,025
Wellington	6	13	53	72	29	200	229	1,837	2,363	4,200
Marlborough	1	...	4	5	...	12	12	118	139	257
Nelson	2	6	5	13	1	86	87	286	438	724
Westland	1	1	7	9	3	21	24	304	352	656
Canterbury	5	9	40	54	15	140	155	1,090	1,680	2,779
Otago	5	8	33	46	21	121	142	1,226	1,631	2,857
Totals	30	51	225	306	110	790	900	7,597	10,333	17,930*

* Exclusive of 59 Maoris (23 boys, 36 girls).

NOTE.—Denominational schools, such as Roman Catholic and Anglican, are included in the above as private schools. Particulars for the Roman Catholic schools in December, 1909, are as under:—

SUMMARY OF ROMAN CATHOLIC SCHOOLS.

Provincial Districts.	Number of Schools.			Number of Teachers.			Number of Scholars (exclusive of Maoris).		Daily Average Attendance.	
	Boys.	Girls.	Mixed.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Auckland	3	4	28	35	10	94	104	1,276	1,677	2,953
Taranaki	...	1	9	10	...	29	29	376	454	830
Hawke's Bay	3	1	5	9	7	22	29	345	353	698
Wellington	3	2	20	25	17	88	105	1,224	1,411	2,635
Marlborough	1	...	2	3	...	10	10	109	125	234
Nelson	2	5	2	9	...	26	26	243	373	616
Westland	1	1	7	9	3	21	24	304	352	656
Canterbury	2	4	18	24	8	72	80	815	1,052	1,867
Otago	4	3	19	26	18	64	82	1,011	1,111	2,122
Totals	19	21	110	150	63	426	489	5,703	6,908	12,611

1,535
416
304
1,286
104
204
536
609
1,442
1,906
6,229
11,341

SCHOOLS FOR NATIVES.

The number of Native-village schools in operation at the end of 1909 either supported or subsidized by the Government was 94. In addition, there were six boarding-schools for Native children, the cost of whose maintenance was partly paid either by the Government or from endowments, and six mission schools.

The subjects of instruction in Native schools are now English, arithmetic, handwork, nature study, morals, singing, and physical drill.

Instruction in woodwork is given in fourteen schools, and in several schools the girls are taught practical dressmaking and plain cookery with simple appliances. A scheme of cottage gardening as a branch of handwork is in operation. In the majority of schools some form or other of elementary handwork is taken with success.

At the six boarding-schools, St. Stephen's and Te Aute for boys, and Hukarere, St. Joseph's, Queen Victoria, and Turakina Schools for girls, the Government provides a number of free places at one or other of these schools, tenable for two years, for children of predominantly Maori race who pass the Fourth or a higher Standard at the Maori village schools. At the end of the year 103 of these places were occupied.

The number of scholarships or free places open to Maori children was 144, of which 119 were held during the year by scholars from Native schools, and five by Maori scholars from various public schools. Six industrial scholarships or apprenticeships were held by Maori youths, who are making good progress at various trades, and the new arrangements are working exceedingly well. In addition to these apprenticeships, agricultural scholarships have been provided for. These are available for suitably qualified Maori boys who desire to learn some branch of farming approved of by the Department. They are tenable for two or for three years, either in the service of a farmer or at a farm under the control of the Agricultural Department, as may be arranged.

Seven Maori girls were attached to various hospitals during the year, four being day-pupils, and three probationers, all of whom appear to be making very satisfactory progress. The difficulty of finding for those who have completed the day-pupil course positions as probationers on the staff of suitable hospitals has not yet been altogether overcome, and in spite of the valued co-operation of the Hospital Department the day-pupils have frequently to wait some time in consequence. Of those nurses who have qualified under the scheme we hear excellent reports. The Maoris in the districts where they have been from time to time placed speak of them in the highest terms of praise, and have stated their opinion that the arrangement is one of the greatest boons the Government has yet granted to the Maori race.

The examination for the Te Makarini Scholarships was held on the 6th and 7th December. There were eight candidates from

various Native village schools for the junior scholarship, and twelve candidates from St. Stephen's School, Auckland, and Te Aute College for the senior. The work of the junior candidates was, on the whole, very fair. Of the English subjects, the composition was not of high merit; the reading appears to have been good, though the comprehension was weak. The dictation and writing, the former of which was somewhat difficult, cannot be regarded as very satisfactory. The arithmetic was much better than that of former years, while the Maori was very creditably done. The work of the senior candidates showed an advance on that of last year. With regard to the English subjects, the written essays in the composition were not of high merit. The results in biblical knowledge, &c., were in many cases disappointing, while the arithmetic was, on the whole, poorly done. The paper in the Maori language was somewhat difficult in character, but the results were fairly good. A tendency on the part of candidates to write "pidgin" Maori is occasionally to be noticed, and marks are lost in consequence. Neatness of work and arrangement and careful writing are not achieved by all the candidates.

Six University Scholarships have hitherto been provided for Maori youths who have passed with credit the entrance examination to the University. Three were reserved for those who wished to study medicine, the remainder being devoted to arts, science, or law. The record of the University Scholarship scheme for Maoris is not encouraging, and the results have not in any way been commensurate with the expense. In recent years the candidates have shown themselves to be lacking in application and to be unworthy of scholarships. To such a degree was this apparent that it has been decided that the scheme should remain in abeyance, and no University Scholarship will therefore, for the present, be awarded.

On the rolls of the ninety-four schools at the 31st December, 1909, there were 4,121 children, as against 4,217 at the end of 1908. The average attendance for the year was 3,680, the percentage of regularity being 85.4, an increase of 1 per cent. on that of the previous year. The average weekly roll number shows a slight falling-off, being 4,308, as against 4,479, a result due largely to the transfer of the schools above referred to. The number of pupils on the rolls of the six Native mission schools was 231, and on those of the secondary Native schools 360. At the end of the year, therefore, the total roll number of all the Native schools inspected by officers of the Department was 4,712, the average weekly roll being 4,898, and the gross average attendance being 4,213.

The total expenditure on Native schools during the year, including £29 10s. 6d. paid from Native reserves funds, was £32,917 16s. Deducting recoveries, £137 17s., the net expenditure amounts to £32,779 19s., as against £33,234 19s. 1d. in 1908. Included in this is the sum of £3,509 9s. 2d. expended on new buildings and additions, £2,704 12s. 3d. on secondary education, including boarding-school fees for holders of scholarships from village schools, industrial scholarships, and nursing scholarships.

The staffs of the village schools included seventy-six masters, eighteen mistresses in charge, 104 assistants, and five sewing-teachers. The total amount paid in salaries for 1909 was £22,177 14s. 9d., the average salary of the head teachers being £169 12s. 4d.

Besides the children of Maori race who are receiving instruction in the Native schools at the end of 1909, there are a still larger number who are attending public schools; so that the total number of primary pupils of Maori race is 8,164, made up as follows:—

Attending Native schools	3,730
" public schools	4,434
	8,164

The number of Maori children in the public schools, as compared with those in Native schools, continues to show an increase, owing principally to the fact that the policy has been steadily followed of handing over Native schools to the Education Boards as soon as the pupils have become, educationally at least, so far European in character that they can be conveniently taught with European children. This point is reached when the Maori can use English fluently in his ordinary conversation. It is part of the same policy to assimilate the programme of work in Native schools as nearly as possible to that in public schools, and to make no distinction in point of salary between teachers in the two classes of schools.

Of the 4,121 children on the rolls of the schools in December, 1909, 86·7 per cent. were Maoris speaking Maori in their homes, 3·8 per cent. were Maoris speaking English, and 9·5 per cent. were Europeans. In connection with this classification, it is to be noted that the term "Maori" as now defined applies only to children who are by birth full Maori, three-quarter Maori, or half-caste, and excludes children who are three-quarter European.

In various public schools in the Dominion there were at the end of 1909 4,434 children of Maori or mixed race. Twenty-one certificates of proficiency and four of competency were gained by Maori children in public schools.

So far as can be ascertained from the statistics obtainable the number of children of Maori or mixed race on the rolls of primary and secondary schools at the end of 1909 (omitting Maoris attending public secondary schools and Maoris at schools not under Government inspection, of whom no separate return is made) was as follows:—

	Actual Number.	Number per 10,000 of Maori Population at Census of 1906 (47,731).
I. Primary schools—		
(a.) Government Native schools	3,730	..
(b.) Mission schools	231	48·4
(c.) Public schools	4,434	928·9
I. Secondary schools	360	75·4
Special technical training ..	13	2·7
Totals	8,768	1,055·4

SCHOLARSHIPS.

Education Board Scholarships.

Under the Education Board scholarship scheme the Education Boards, under local regulations approved by the Minister of Education, award annually a large number of scholarships of varying value out of an allowance of old standing, amounting to 1s. 6d. per head of the average attendance. The regulations adopted in the different districts commonly provide for two classes of scholarships, junior and senior—the former limited to children under fourteen or in some cases under thirteen years of age resident in the district, and tenable usually for two years; the latter, more restricted in number, continuing the secondary education of the holders for two or three years longer.

During the year 1909 Education Board scholarships—junior and senior—were current to the number of 533, as against a total of 484 for 1908. The actual monetary value of these scholarships in most instances is small, the object in view being generally to spread the benefits as widely as possible rather than to provide attractive prizes for a few. Each scholarship, however, through the operation of the provisions for free places, which give a preference to scholarship-holders, carries with it in all but certain exceptional circumstances the substantial benefit of free tuition, and a lodging or travelling allowance is added where necessary. The total expenditure of Education Boards on scholarships of this class during the year 1909 was £8,694. The following table shows the number and value of Education Board scholarships current at the end of 1909:—

Education Districts.	Number held in Dec., 1909.			Period of Tenure.	Boards' Expenditure on Scholarships in 1909.			Annual Value, &c.
	Boys.	Girls.	Total.					
				Years.	£	s.	d.	
Auckland ...	62	30	92	3	2,038	4	9	34 at £40, 58 at £10.
Taranaki ...	11	5	16	2	341	6	9	8 at £35, 4 at £10, 4 at £5.
Wanganui ...	24	13	37	2 or 3	788	9	9	10 at £40, 4 at £23 10s., 6 at £21, 17 at £10.
Wellington ...	48	35	83	2	1,220	18	7	18 at £40, 1 at £8 5s., 1 at £7 2s. 6d., 1 at £9, 3 at £6 7s. 6d., 7 at £6 5s., 52 at £5.
Hawke's Bay ...	40	22	62	2	586	5	0	13 at £30, 1 at £12 10s., 6 at £10, 1 at £8 10s., 2 at £7 10s., 39 at £2 10s.
Marlborough ...	6	6	12	2	118	14	0	3 at £25, 3 at £10, 6 at £2.
Nelson ...	13	18	31	2	333	15	0	7 at £40, 1 at £25, 23 at £1 5s.
Grey ...	2	3	5	2	64	0	0	1 at £26 10s., 4 at £8.
Westland ...	2	4	6	1 or 2	70	0	0	2 at £24, 1 at £10, 3 at £4.
North Canterbury	34	21	55	2	940	14	10	2 at £17, 8 at £16, 12 at £15, 15 at £14, 15 at £13, £12.
South Canterbury	13	12	25	2	340	0	10	7 at £27, 2 at £12, 16 at £7.
Otago	46	22	68	2 or 3	1,207	2	0	17 at £40, 51 at £10.
Southland ...	25	16	41	2 or 3	644	8	3	17 at £30, 24 at £5.
Totals, 1909 ...	326	207	533	...	8,693	19	9	
Totals, 1908 ...	286	198	484	...	8,282	16	4	

In extension of the provisions for scholarships, the arrangements now in force, by which pupils of fair promise are admitted to free tuition in secondary and other schools, are very comprehensive and far-reaching in their effects. For all who deserve it there is now a free course from the initiatory stages of the primary school to the doors of the University, and by means of further scholarships and bursaries, making classes at the colleges free to all duly qualified students, a further step of progress to the distinction of a University degree is also possible in terms of similar advantage.

Beyond the limits of the secondary school the opportunities given to promising students are considerable. Besides the scholarships offered by the University itself out of its own funds, there are available, under separate statutory provision, a still larger group of Senior National Scholarships of similar value tenable for the period of a student's undergraduate course, which are annually awarded on the results of the Junior University Scholarship Examination, together with one Taranaki Scholarship awarded on a similar basis. At the close of 1909 under these two headings thirty-one entrance scholarships were awarded to matriculated students by the University Senate, which is intrusted with the control of both classes of scholarships. Certain local and privately endowed scholarships (about thirty-eight in number) are also awarded in various districts on the same examination.

University bursaries, covering free tuition at University college classes for a period of three years, are also offered out of the public funds to all who obtain credit in the Junior University Scholarship Examination, and otherwise possess the qualifications for a National Scholarship without obtaining one. With these provisions there can be few indeed entitled to special consideration who are deterred from a University course by the question of the cost of classes.

National Scholarships.

An Act to encourage higher education in New Zealand by the granting of National Scholarships was passed in 1903, and has since been incorporated in the Education Act, 1908. Provision is made for the establishment of Junior and Senior Scholarships, the necessary funds being furnished by the Minister of Finance.

A Junior Scholarship is offered in each education district for every four thousand or part of four thousand children in average yearly attendance, tenable for three years, with the possibility of extension for one or more years up to the age of eighteen years. Candidates must not exceed the age of fourteen years. The value of a Junior Scholarship is £10 per annum, in addition to tuition fees.

Senior National Scholarships, not exceeding twenty in number, are awarded annually to persons of either sex under nineteen years of age on the result of the Junior Scholarship Examination of the University. The value of a Senior Scholarship is £20 per annum in addition to tuition fees, and it is tenable for three years.

Where the holder of a Junior or Senior National Scholarship is obliged to live away from home in order to prosecute his or her studies an additional sum of £30 per annum is paid, or actual travelling-expenses, not exceeding £10 per annum are allowed if the holder of a scholarship is obliged to travel more than four miles daily in order to prosecute his or her studies.

At the end of 1909 the number of Junior National Scholarships current was 108, 95 of which were held at secondary schools and 13 at district high schools. Apart from fees otherwise accounted for under the heading of free-place expenditure, the cost of Junior National Scholarships for the year was £2,748. The number of Senior National Scholarships current was forty-eight, for which the New Zealand University received a grant from the Treasury of £2,998 2s. 6d.

SPECIAL SCHOOLS.

The special schools of the Dominion provide for the instruction of children who are deaf, blind, feeble-minded, epileptic, delinquent, neglected, or indigent. The function of such schools in the educational system of a country is to endeavour to overcome as far as practicable the disabilities under which these young people suffer, and ultimately to give them an equipment for their work in life that will enable them to maintain themselves without assistance from the public funds or from their friends.

At the end of the year the total number belonging to these schools was 2,539, and the net charge on the public funds for the year was £42,385. The figures for each class of school were as follows:—

				Number under Government Control.	Net Cost. £
School for the Deaf	..	..	..	89	4,038
Jubilee Institute for the Blind	..	..	..	39	687
Special School for Boys of Feeble Mind	..	..	..	31	4,103
Industrial Schools	..	..	..	2,380	33,557

Of the total cost, £7,441 represents the amount expended in the purchase of land, erection of buildings, and equipment of institutions. The total amount collected from parents and guardians by way of payment towards the cost of education and maintenance was £7,059.

The establishment of a special school for the training of boys of feeble mind has now been accomplished, and, though still in its infancy, there is good ground for anticipating that its effect in training boys of this class to make a living for themselves will fully justify its existence. It is, however, at least equally important that there should be a similar school for girls, and this matter is now under the consideration of the Government.

Important amendments were made by the Legislature last session in the Industrial Schools Act. Attention may be drawn to two of these, especially that which gives power to a Magistrate to extend from time to time the period of control over a young man or woman who is adjudged by him to be morally degenerate or otherwise not (in the public interest) a fit person to be free from control. The other far-reaching provision is that giving power to the police to bring before a Magistrate on warrant, with a view to admission to an industrial school, any boy or girl under sixteen years of age who "is not under proper control."

In December, 1909, the total number on the books of industrial schools was 2,380, or 117 more than at the close of 1908; on the books of the Government schools there were 1,747, an increase of 38 over the corresponding number of 1908; on the books of the private schools there were 533, or 21 less than at the end of the previous year. The number in residence at Government schools was 420 and at private schools 372, so that 771 was the total number of inmates actually in residence. The number boarded out was 770 (10 without payment), 3 being from private schools, and the rest from Government schools. There were 17 girls maintained in various corrective institutions, 6 boys and 3 girls in hospital, 2 boys and 4 girls in orphanages, 6 boys and 1 girl in mental hospitals, 3 boys and 1 girl at the school for the deaf, 2 at the special school for the feeble minded, 1 boy at the Jubilee Institute for the Blind, 3 boys on training-ship, licensed to remain with friends 257, at service 464, in gaol 2, absent without leave 67.

The numbers of children on the books at the end of the years 1908 and 1909 respectively whose maintenance was a charge against the public funds were as follows:—

	1908.	1909.
Boarded out from Government schools ..	718	757
Boarded out from private schools	7	3
Number resident at schools	792	771
At other institutions	40	35
Total	1,557	1,566

	1908.	1909.
	£ s. d.	£ s. d.
The amount of parental contributions was	5,604 6 7	5,786 8 5
Rate per head for children maintained ..	3 12 0	3 13 11

INMATES, 1908 AND 1909.

	Boarded out.			In Residence:				At Service, &c.				Totals.					
	Dec., 1908.	Increase.	Decrease.	Dec., 1909.	Dec., 1908.	Increase.	Decrease.	Dec., 1909.	Dec., 1908.	Increase.	Decrease.	Dec., 1909.	Dec., 1908.	Increase.	Decrease.	Dec., 1909.	
Government Schools—																	
Auckland																	
(Mount Albert)	82	8	..	90	33	..	6	27	64	..	6	58	179	..	4	175	
Boys' Training Farm, Weraroa	9	..	4	5	159	6	..	165	118	46	..	164	286	48	..	334	
Receiving Home, Wellington	275	21	..	296	6	1	..	7	63	19	..	82	344	41	..	385	
Te Oranga Home, Christchurch	..	..	..	..	54	2	..	56	28	2	..	30	82	4	..	86	
Receiving Home, Christchurch	189	10	..	199	8	3	..	11	82	19	..	101	279	32	..	311	
Burnham	..	3	..	2	1	124	2	..	126	116	4	..	120	243	4	..	247
Caversham	..	166	10	..	176	36	..	8	28	94	11	..	105	296	13	..	309
Private Schools—																	
St. Mary's, Auckland	..	..	..	..	125	..	2	123	49	..	7	42	174	..	9	165	
St. Joseph's, Wellington	..	..	..	..	37	..	5	32	20	8	..	28	57	3	..	60	
St. Mary's, Nelson	..	..	..	..	166	..	15	151	92	..	1	91	258	..	16	242	
St. Vincent de Paul's, Dunedin	7	..	4	3	44	1	..	45	14	4	..	18	65	1	..	66	
Totals	..	731	49	10	770	792	15	36	771	740	113	14	839	2,263	146	292	380

There were seven Government schools in existence in 1909, and the numbers of inmates on their books at the end of the year were as follows: Auckland (Mount Albert), 175; Boys' Training Farm, Weraroa, 334; Receiving Home, Wellington, 385; Receiving Home, Christchurch, 311; Burnham, 247; Te Oranga Home, 86; Caversham, 309: total, 1,847. Those belonging to private schools were distributed as follows: St. Mary's, Auckland, 165; St. Joseph's, Wellington, 60; St. Mary's, Nelson, 242; St. Vincent de Paul's, Dunedin, 66: total, 533.

The cost of the Government schools and the amount recovered (from Charitable Aid Boards, from parents, from sale of farm-produce, &c.) are shown:—

COST OF GOVERNMENT SPECIAL SCHOOLS, 1909.

Government School.	Cost of School, including Buildings and other Works.	Boarding out. (Included in first column).	Salaries. (Included in first column).	Recoveries.	Net Cost.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Auckland ..	3,309 9 6	1,646 8 1	550 12 6	1,205 16 2	2,103 13 4
Boys' Training Farm, Weraroa	8,047 17 8	107 14 8	2,083 14 6	1,729 7 11	6,318 9 9
Receiving Home, Wellington	7,089 16 2	5,041 4 10	724 4 9	4,386 15 7	2,703 0 7
Te Oranga Home	6,268 13 9	..	848 5 8	191 19 4	6,076 14 5
Receiving Home, Christchurch	5,188 18 0	3,553 0 2	590 5 0	2,241 14 3	2,947 3 9
Burnham ..	9,091 9 8	6 3 2	2,578 8 4	1,015 3 9	8,076 5 11
Caversham ..	5,030 14 8	2,964 9 7	775 12 11	3,436 17 8	1,593 17 0
Totals ..	44,026 19 5*	13,319 0 6†	8,151 3 8	14,207 14 8	
Salaries, travelling-allowances, and expenses of certain departmental officers (Inspectors, visiting officers, &c.) ..					1,424 14 9
Payments to certain former inmates of their earnings held in trust ..					42 3 6
Grant to Postal Department in connection with payments for children boarded out ..					100 0 0
Contingencies ..					44 11 6
Total net cost ..					£31,430 14 6

* Includes cost of new buildings and other works: Boys' Training Farm, Weraroa, £213 8s. 8d.; Te Oranga Home, £4,302 18s. 11d.; Burnham, £1,320 18s. 5d.; and Receiving Home, Wellington, 16s.: total, £5,838 2s. † Exclusive of cost of administration, inspection, &c.

The next table shows payments made by the Government on account of inmates in private special schools, the recoveries, and the net expenditure by the Government. The contributions from Charitable Aid Boards to these schools, being made directly to the managers, are not included in the recoveries shown.

GOVERNMENT EXPENDITURE ON PRIVATE SPECIAL SCHOOLS (R.C.), 1909.

Name of School.	Gross Cost.	Recoveries.	Net Cost.
	£ s. d.	£ s. d.	£ s. d.
St. Mary's, Auckland ..	1,642 5 0	564 7 0	1,077 18 0
St. Joseph's, Wellington ..	205 16 5	71 11 0	134 5 5
St. Mary's, Nelson ..	890 5 9	311 6 5	578 19 4
St. Vincent de Paul's, Dunedin	173 19 0	38 9 0	135 10 0
Totals ..	2,912 6 2	985 13 5	1,926 12 9

During 1909 inmates were maintained in seven other institutions, and the expenditure on this account was as follows: Costley Training Institution, Auckland, £36 10s.; Orphan Home, Papatoetoe, Auckland, £31 13s 6d.; Door of Hope Institution, Auckland, £20 14s, 10d.; Salvation Army Maternity Home, Auckland, £26 2s. 10d.; Mount Magdala, Christchurch, £63 6s.; Essex Street Refuge, Christchurch, £5; and St. Mary's, Karori, Wellington, £16 18s. 7d.

Jubilee Institute for the Blind.

This institution is governed by a Board of Trustees, four of whom are appointed by the Government, and the remaining five elected by the subscribers to the funds of the institute. As the institute comes within the scope of the Hospitals and Charitable Institutions Act, subsidy at the rate of 24s. in the pound is payable by the Government on voluntary subscriptions received by the Board, and 10s. in the pound on the value of bequests. The amount of such subsidy payable to the Board during its last financial year was £1,967.

The number of pupils between seven and sixteen years of age for whom the Government paid was 21 at the end of 1908, and 25 at the end 1909, and the number between sixteen and twenty-one years rose during the year from 8 to 12. The tuition of 2 adults was also paid for. Thus the Government contributed towards the cost of training 39 pupils, the expenditure being £903, as against £705 for the previous year. The amount of contributions by parents and guardians was £215 19s. 3d. ; for 1908 it was £154 17s. 3d.

School for the Deaf.

The roll of this school includes all the known deaf-mutes of school age and of sound intellect in New Zealand who have been brought under the notice of the Education Department.

The number in residence at the end of 1909 was 89, or 7 more than at the end of 1908.

The method of instruction used at Sumner is the oral method, in favour of which there is a vast predominance of expert opinion.

As regards the adoption of that system, the Minister of Education remarks, "It cannot be too often repeated that in this institution the deaf, who would otherwise be speechless, are taught both to speak and to understand (from the motion of the lips) the speech of others, and that they are thereby admitted not only to the benefits of communication with their fellow-men, but even very largely to the conceptions involved in human intercourse. These facts are not always understood or appreciated. Every year deaf children are found who, to a greater or less extent, have passed the age at which their special instruction should have begun, and who consequently fail to attain expertness in oral communication, or more than partial mental development. Through want of knowledge of the institution, through mistaken advice, through misguided affection, or through fear of expense, the parents of these children are responsible for a loss of time that can never be made good."

The following classes of deaf children are admitted to the institution, mental soundness being in all cases a necessity:—

1. Children born deaf, or who have lost their hearing before learning to speak.
2. Children who can hear a little, but are too deaf to be taught in an ordinary school.

The cost of the school for the years 1908 and 1909 respectively was as follows:—

	1908.			1909.		
	£	s.	d.	£	s.	d.
Salaries	2,812	2	8	2,916	2	7
Maintenance of pupils	1,461	3	7	1,513	6	8
Buildings and other works	158	16	2	..	..	..
Maintenance of buildings and water charges	354	16	10	332	15	6
Sundries	121	9	0	121	19	0
Amount collected from parents by way of main- tenance contributions	694	9	8	838	11	0
Sundry other recoveries	24	8	10	6	18	11
Net expenditure on the institution	4,189	9	9	4,038	14	10

There was an increase of 24·8 per cent. in parental contributions, as against an increase of 8·5 per cent. in the number of pupils under instruction.

SPECIAL SCHOOL FOR BOYS OF FEEBLE MIND.

This school is situated at Otekaike, in North Otago, near the Oamaru-Hakataramea Railway. It is not yet fully organized; but additional buildings that are now completed will provide accommodation for a considerably increased number of boys. It is to be borne in mind that Otekaike deals with only those who are capable of being trained in some degree; those more severely afflicted are dealt with by the Mental Hospitals Department. Eventually in all probability it will be found advisable, for economic and other reasons, to provide at Otekaike for both feeble-minded and epileptic young people who are capable of being educated. Although no definite estimate of the number of cases to be dealt with has yet been obtained, there is evidence that, if the matter of protecting the community from the consequences of failure to train children of these characteristics is vigorously taken in hand, a substantial outlay will be necessary. As many of the epileptic and feeble-minded will never be able to successfully face the stress of life, it is necessary that they be provided for in institutions where, under expert supervision, they can by manual employment earn or partly earn the cost of their maintenance.

At present there are 31 boys in residence at the Otekaike School.

The cost of the school for the year was £4,103, made up as follows:—

	£	s.	d.
Salaries	1,102	15	4
Maintenance of pupils	647	14	11
Maintenance of buildings	243	19	7
Farm and stock	612	19	9
Additional buildings, fencing, &c.	1,602	18	3
Sundries	180	6	10
Less—Amount collected from parents by way of maintenance contributions	182	2	2
Sundry other recoveries	105	2	11
Net expenditure on the institution	4,103	9	7

The number of boys will soon be about seventy, and the cost of maintenance per head will then be considerably reduced. (The cost per head in the Parental School at Chicago, U.S.A., was £76 5s. 2d. in 1906.)

Parliament did not appropriate any sum in 1909–10 for payment of subsidies to public libraries.

SECTION II.—LOCAL GOVERNING BODIES.

COUNTIES, BOROUGHES, ETC.

For purposes of local government New Zealand is divided into counties and boroughs, the counties being, for administrative purposes in some cases, subdivided into road and town districts, and certain of the latter, those having a population of over five hundred, possess powers independent of county control.

Counties are constituted by special Act, but two or more existing counties may, by Proclamation, be united to form one county. Boroughs are constituted by Proclamation, and must possess a population of not less than one thousand, but must not exceed in area more than nine square miles, nor must any point be distant farther than six miles from another. Any locality not exceeding two square miles in area, outside a borough, and wherein there are not less than fifty householders, may be proclaimed a town district. A road district may comprise any portion of the area of the county within which it lies, and may be created by special order of the council of such county. Harbour Boards are formed by special Act, and in some cases possess rating powers over areas already included within counties and boroughs. Special districts, with limited powers, may be constituted for specific purposes such as river protection, drainage, water-supply, &c., within the areas wherein such services are required.

Although the boroughs, of which there were 111 in March, 1910, lie geographically within the counties, yet by the law they are not considered as part of them. On the 31st March, 1910, the counties numbered 110. The number is increased from time to time as need is found by the subdivision of existing districts. In the year 1878 there were only 63 counties. There were, however, 186 road districts (five without Boards) in existence in March, 1910, and 54 town districts. One of these latter is the special Town District of Rotorua, the affairs of which are administered by officers of the

General Government. Besides the above there were 39 river protective districts (excluding Inch-Clutha, in Bruce County, which is also a road district), 3 drainage districts (Christchurch, Dunedin, and Auckland Suburban), 3 water-supply districts (one without Board), and 41 land drainage districts under the Land Drainage Act (two without Board). The Harbour Boards numbered 33, excluding Coromandel, Kawhia, Port Robinson, Kaikoura, Fortrose, and Half-moon Bay, for which the County Councils of Coromandel, Kawhia, Cheviot, Kaikoura, Southland, and Stewart Island act as the Harbour Boards, also New River and Port Molyneux, for which the Invercargill Borough Council and the Clutha River Board act as Harbour Boards.

These bodies levied rates in the financial year 1909-10 to the amount of £1,526,307, of which £1,058,447 consisted of general rates, and £467,860 special and separate rates. The sum of £80,469 was raised by licenses, and £28,000 by other taxes, making £1,634,777 altogether, which sum is equivalent to £1 13s. 8d. per head of the mean European population. In the year 1908-9 the local taxation was £1 11s. 6d. per head, or 2s. 2d. less than in 1909-10.

It will be seen from the table following that revenue derived from rates increased from £463,581 in 1890-91 to £1,526,317 in 1909-10. Revenue from Government has increased in the same period (twenty years) from £144,008 to £195,624. Receipts which cannot be classed as "revenue" were £236,902 in 1890-91, against £2,362,171 in 1909-10; but these figures vary from year to year according to circumstances, such as large operations by way of construction of works, for which money has to be specially raised.

The receipts (distinguishing revenue from other sources of income) and expenditure of the various local bodies, with the amount of rates collected, and the amount of indebtedness on account of loans for each of the past twenty years, are shown in the following table:—

LOCAL GOVERNING BODIES.—RATES, RECEIPTS EXPENDITURE, AND LOANS, 1890-1 TO 1909-10.*

Year ended 31st March.	Receipts of Local Bodies.					Expendi- ture of Local Bodies.†	Outstanding Loans of Local Bodies (ex- cluding Go- vernment Loans, for which see the following Columns).	Outstanding Debentures under the Roads and Bridges Construction Act.	Net Indebtedness in February of each Year under Local Bodies' Loans Acts (Including Deben- tures under the Roads and Bridges Construction Act, converted).
	Revenue from								
	Rates.	Licenses, Fees, Rents, and other Sources.	Govern- ment.	Total Revenue.					
					£				
1891	463,581	518,757	144,008	1,126,346	236,902	1,363,248	1,381,320	4,317	367,715
1892	488,824	584,274	109,022	1,182,120	214,124	1,396,244	1,400,467	4,245	449,532
1893	508,157	573,161	136,515	1,217,833	340,538	1,558,371	1,482,548	3,465	525,173
1894	551,412	547,560	134,271	1,233,243	623,038	1,856,281	1,589,124	2,685	547,679
1895	581,868	545,629	138,228	1,265,725	328,798	1,594,523	1,584,518	2,015	621,903
1896	592,903	581,966	156,180	1,331,049	269,145	1,600,194	1,627,079	1,442	667,451
1897	598,526	586,599	178,448	1,363,573	246,919	1,610,492	1,636,716	1,077	703,282
1898	644,552	608,436	182,166	1,435,154	304,645	1,739,799	1,733,016	712	742,530
1899	685,769	642,289	178,438	1,506,496	385,368	1,891,864	1,778,574	347	789,618
1900	714,151	695,988	152,044	1,562,133	372,028	1,934,211	1,960,073	..	810,192
1901	734,023	751,046	168,785	1,653,854	825,039	2,478,893	2,250,572	..	902,769
1902	800,471	848,983	170,041	1,819,495	775,432	2,594,927	2,528,092	..	1,046,645
1903	846,716	897,328	156,254	1,900,298	966,087	2,866,385	2,867,506	..	1,266,002
1904	930,150	1,029,550	176,513	2,156,219	1,142,595	3,298,814	3,230,712	..	1,401,752
1905	1,019,431	1,088,587	166,635	2,274,653	1,350,631	3,625,284	3,497,321	..	1,526,353
1906	1,151,219	1,223,138	169,010	2,543,367	1,326,597	3,869,964	3,601,506	..	1,580,494
1907	1,233,049	1,386,459	192,932	2,812,440	1,227,473	4,039,913	3,897,515	..	1,647,273
1908	1,356,237	1,548,479	202,186	3,106,922	1,410,994	4,517,916	4,491,113	..	1,691,083
1909	1,390,698	1,710,712	223,410	3,324,820	1,440,746	4,765,566	4,800,711	..	1,839,017
1910	1,526,317	1,738,410	195,624	3,460,351	2,362,171	5,822,522	4,898,482	..	1,925,606

* The figures for the Harbour Boards (excepting Wellington, the period being for the year ending 30th September, 1909, and the Coronandel, Kaikoura, Kawhia, Fortrose, Half-moon Bay, and Horse-shoe Bay, New River, Port Molyneux, and Riverton Harbour Boards, the figures for which are for the year ended 31st March, 1910) included are for the calendar years ended three months previous to the financial years.

† Not including balances, deposits, or amounts paid to sinking funds and for redemption of debentures.

The indebtedness of local governing bodies on account of outstanding loans has increased in twenty years from £5,978,059 to £14,937,685, exclusive of moneys borrowed from Government, which represented a further indebtedness of £1,925,606 at the end of March, 1910.

TAXATION BY LOCAL BODIES.

TABLE showing the Revenue of Local Governing Bodies derived from Rates, Licenses, and other Taxes during the Year 1909-10.

Local Bodies.	Rates.		Licenses.		Other Taxes.		Total.	
	General.	Special and Separate.						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Counties* ...	432,648 9 0	85,616 15 1	13,165 18 0	13,949 18 11	550,581 1 0			
Boroughs* ...	389,382 10 5	346,999 7 7	56,499 7 11	10,369 17 11	802,851 3 10			
Town Boards* ...	17,454 0 8	2,550 11 4	3,490 11 0	1,010 9 7	24,505 12 7			
Road Boards* ...	114,264 12 2	18,088 16 2	2,513 13 4	2,644 18 1	137,431 19 9			
River Boards* ...	7,578 8 3	2,280 14 8	...	1 10 4	9,860 13 3			
Land Drainage Boards* ...	9,250 15 9	3,609 2 0	...	4 14 9	12,864 12 6			
Harbour Boards† ...	44,680 4 5	...	...	...	44,680 4 5†			
City and Suburban Drainage Boards* ...	41,841 9 6	2,874 6 6	...	...	44,715 16 0			
Water-supply Boards* ...	1,346 10 0	5,920 7 7	...	18 15 2	7,285 12 9			
Totals ...	1,058,447 0 2	467,860 0 11	80,469 10 3	28,000 4 9	1,634,776 16 1§			

* For year ended 31st March, 1910. † Wellington Harbour Board, for year ended 30th September, 1909. ‡ Wharfage dues, charges, fees, tolls, &c., £62,413 2s. 5d., and rents and other sources, £62,459 15s. 3d., have not been classed as taxation. § Equal to £1 1s. 5d. per head of the mean European population of the Dominion for the financial year 1909-10.

Of the total taxation by rates, amounting to £1,526,307, 30 per cent. was levied on the unimproved value, and 70 per cent. on the capital or annual value of rateable properties.

RECEIPTS AND EXPENDITURE, 1909-10.

A summary of all the transactions for the year 1909-10 is given on pages 157 to 161. The total revenue of the local bodies for the financial year was £3,460,351, and they further received a sum of £2,362,171 which could not properly be termed "revenue," making altogether a grand total of receipts amounting to £5,822,522. The rates formed 44 per cent. of the revenue proper. Licenses, rents, and other sources yielded 50 per cent., and 6 per cent. was granted by the General Government.

While the revenue proper of the counties amounted to £711,004, of which those bodies raised £518,266 by way of rates, the Road Boards' revenue was only £173,132, out of which £132,273 represented the result of their rating. The boroughs had the far larger revenue of £1,619,360, including £736,392 of rates, and their receipts under the heading of licenses, rents, and other sources amounted to the considerable sum of £839,081. In the matter of receipts from Government, of which a table is printed on the next page, the counties received the bulk of the money.

The details of amounts received, representing Government support to the various bodies, are stated in the following table:—

LOCAL GOVERNING BODIES.—RECEIPTS FROM GOVERNMENT, 1909-10.

	Counties.	Boroughs.	Town Boards.	Road Boards.	River Boards (excluding Inland Clutha, also Road Board).	Land Drainage Boards.	Harbour Boards.	City and Sub-urban Drainage Boards.	Totals.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Rates on Crown and Native lands...	25,269 19 5	27 4 4	1 18 0	2,064 15 2	...	...	...	...	27 4 4
One-third receipts from land sold on deferred payment and from perpetual lease		39 9 3	...	...	...	...	...	...	27,456 1 10
One-fourth of rents from small grazing-runs	2,135 4 6	...	...	405 2 2	...	...	...	...	2,540 6 8
Timber and flax royalties	8,175 6 6	...	...	887 0 11	...	...	...	...	9,062 7 5
Goldfields revenue and gold duty	19,170 2 9	23,439 10 6	1 8 2	143 13 9	...	...	...	...	42,754 14 7
Subsidies on rates	70,636 9 0	18,648 3 2	2,331 6 1	15,163 4 7	...	...	...	...	106,779 2 10
Fees and fines	762 9 6	982 5 10	13 1 0	7 3 11	...	4 6 5	...	...	1,769 5 8
Other receipts	597 14 11	630 4 3	1,602 1 6	345 2 10	204 3 7	...	...	...	5,439 7 1
Total Revenue Account	126,747 6 0	43,856 17 4	5,949 14 9	19,036 3 4	204 3 7	4 5 5	...	...	195,828 10 5
Loans from Government under Loans to Local Bodies Acts	112,926 0 2	72,272 0 0	449 0 0	27,690 15 1	1,500 0 0	15,762 11 3	...	...	230,600 6 6
Grants for special works, &c.	109,934 10 3	6,844 1 1	425 0 0	9,591 8 0	3,794 8 0	913 18 3	...	...	130,803 14 7
Total receipts from Government	348,908 5 5	123,002 18 5	6,823 14 9	56,318 6 5	5,498 11 7	16,660 14 11	...	...	557,232 11 6

LOCAL GOVERNING BODIES.—RECEIPTS, EXPENDITURE, AND LOANS, 1909-10

Financial Year ended 31st March, 1910.

	Countries.	Boroughs.	Town Boards.	Road Boards.	River Boards (excluding Incl. Clutha, also Road Board).	Land Drainage Boards.	Water-supply Boards.	Christchurch Tramway Board.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Receipts:—								
Revenue from—								
Rates	518,265 4 1	736,391 18 0	20,004 12 0	132,273 8 4	9,859 2 11	12,559 17 9	7,266 17 7	...
Licenses, rents, and other sources	65,391 13 6	839,081 8 0	11,384 6 9	16,226 5 4	7,491 16 11	796 10 7	387 9 1	105,024 10 8
Government* County	126,747 6 0	43,886 17 4	5,949 14 9	19,036 3 4	204 3 7	4 5 5	...	...
	...	...	230 11 0	5,595 19 6	10 0 0	...	...	...
Total revenue	711,004 3 7	1,619,360 3 4	37,629 4 6	173,131 16 6	17,565 3 5	13,660 13 9	7,654 6 8	105,024 10 8
Receipts not revenue	268,297 11 5	876,391 10 9	9,347 6 8	53,478 5 9	5,501 6 0	17,930 12 6	465 13 6	...
Total receipts	979,301 15 0	2,495,751 14 1	46,976 11 2	226,610 2 3	23,066 9 5	31,591 6 3	8,120 0 2	105,024 10 8
Expenditure:—								
Public works	681,240 7 11	966,095 10 8	29,624 6 2	163,085 3 9	11,310 0 4	21,970 3 7	3,717 7 1	59,611 10 10†
Charitable aid and hospitals	68,429 16 7	54,292 10 11	1,624 1 7	11,166 11 6	...	...	...	...
Management	91,928 4 0	116,521 2 3	4,944 9 2	17,262 7 4	2,166 5 1	2,062 4 8	637 7 3	20,891 1 5
Other expenditure	109,703 5 7	1,074,388 18 9	11,496 6 10	25,292 11 6	7,471 1 7	5,738 9 8	2,342 18 3	...
Total expenditure	951,301 14 1	2,211,296 2 6	47,669 3 9	216,806 14 1	20,947 7 0	29,770 17 11	6,697 13 1	80,502 12 3
Liabilities (includes loans, excepting those from Government)	261,898 12 10	8,430,948 15 7	43,274 15 0	111,704 7 11	29,211 11 5	29,729 1 11	21,712 18 11	490,334 1 8
Loans (excluding loans under Roads and Bridges Construction Act, and the Loans to Local Bodies' Act†)	76,877 0 0	7,687,209 0 0	38,069 0 0	80,040 0 0	27,350 0 0	17,020 0 0	21,200 0 0	437,000 0 0

* For amounts under various heads see preceding table; also for specification of loans under Loans to Local Bodies Acts, and special grants, which are here included with "Receipts not revenue." † Including expenses of management. ‡ For rates of interest see page 163.

NOTE.—The return of receipts and expenditure in this summary represents the net receipts and expenditure of the year, exclusive of credit and debit balances, bank overdrafts, deposits, amounts paid to sinking funds, and for redemption of debentures.

LOCAL GOVERNING BODIES.—RECEIPTS, EXPENDITURE, AND LOANS—*continued.*

	Financial Year ended		Totals—all Local Bodies.
	31st March, 1910. City and Suburban Drainage Boards.*	31st December, 1909. Harbour Boards.*	
Receipts:—			
Revenue from—	£ s. d.	£ s. d.	£ s. d.
Rates	44,715 16 0	44,680 4 5	1,526,317 1 1
Licenses, rents, and other sources ...	1,022 3 1	684,902 17 8	1,732,309 1 7
Government†	...	...	195,828 10 5
County	...	...	5,896 10 6
Total revenue	45,737 19 1	729,583 2 1	3,460,351 3 7
Receipts not revenue	190,731 1 5	940,027 11 3	2,362,170 19 3
Total receipts	236,469 0 6	1,669,610 13 4	5,822,522 2 10
Expenditure:—			
Public works	90,177 12 1	669,638 1 8	2,696,470 4 1
Charitable aid and hospitals... ..	...	...	135,518 0 7
Management	9,966 2 5	78,332 17 3	344,712 1 3
Other expenditure	52,896 15 7	432,466 3 8	1,721,786 11 5
Total expenditure	153,030 10 1	1,180,437 2 7	4,898,481 17 4
Liabilities (includes loans, excepting those from Government)	769,795 10 9	6,049,470 2 8	16,238,019 18 8
Loans (excluding loans under Roads and Bridges Construction Act and Local Bodies' Loans Acts)	764,500 0 0	5,788,400 0 0	14,937,685 0 0

* Wellington Harbour Board for year ended 30th September, 1909; and Christchurch Drainage Board for year ended March, 1910. † See note to table on previous page.
; Not including loan from Government, amounting to £1,925,606, repayable by instalments.

The expenditure of the local bodies amounted to £4,898,481. In the counties the cost of management, including salaries, travelling expenses, rent, printing and advertising, collection of rates or tolls, legal expenses, and sundries, was £91,928. The Borough Councils expended in the same way £116,521, and the Road Boards £17,262.

The percentages borne by the cost of management to the total receipts and total expenditure were:—

Cost of Management per Cent. of	Total Receipts.	Total Expenditure.
Counties	9·3	9·6
Boroughs	4·6	5·2
Road Boards	7·6	8·0

HARBOUR BOARDS.

The amount of receipts and expenditure for each of the Harbour Boards for the year ended 31st December, 1909 (excepting Wellington, the accounts for which were made up for the year ending 30th September, 1909, and Coromandel, Fortrose, Half-moon Bay and Horseshoe Bay, Kaikoura, Kawhia, New River, and Riverton, to 31st March, 1910), also the liabilities at date of balancing, including outstanding loans, have been tabulated as follows:—

Harbour Boards.	Receipts.			Expenditure (excluding Amounts paid to Sinking Fund and for Redemption of Debentures).										Liabilities (excluding Loans from Govern-ment).						
	Revenue from			Receipts and Revenue.			Total Receipts.			Works and Main-tenance.			Other Expendi-ture, Interest, &c.			Out of Loan.			Total Ex-penditure.	
	Wharfage Dues, Charges, Fees, Tolls, &c.	Rents and other Sources.	Total Revenue.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.		£	s. d.	£	s. d.		£	s. d.
Auckland ...	76,958 15 5	18,380 0 9	95,338 16 2	(a)360,636 15 7	120 12 11	455,975 11 9	72,080 2 6	52,152 19 2	(b)173,560 5 10	297,813 6 6	61,092 580 0 0	...	...	...	...	...	...	...	...	
Bluff ...	22,581 19 1	3,037 14 3	25,619 13 4	...	...	25,740 6 3	20,837 4 0	3,488 6 2	...	26,325 10 2	84,668 6 2	...	...	...	...	...	...	...	...	
Coromandel(c) ...	31 15 8	10 0 0	31 15 8	...	...	31 15 8	24 0 0	...	...	24 0 0	...	...	...	...	...	...	...	...	...	
Fortrose(d) ...	...	10 0 0	10 0 0	...	...	423 1 9	214 0 7	85 10 6	...	239 11 1	...	...	...	...	...	...	...	...	...	
Foxton ...	272 8 0	150 13 2	423 1 9	...	...	20,336 1 1	15,973 4 11	10,489 0 7	...	26,462 5 6	210,139 8 3	...	...	...	...	...	...	...	...	
Gisborne ...	18,807 9 11	1,528 11 2	20,336 1 1	51 10 0	13,300 0 0	36,395 10 9	17,035 11 11	7,452 7 10	(e)7,805 8 11	32,293 8 8	337,110 6 5	...	...	...	...	...	...	...	...	
Greymouth ...	22,024 4 10	1,001 5 11	23,025 10 9	500 0 0	555 18 11	630 11 8	...	...	...	682 12 8	15 10 5	...	...	...	...	...	...	...	...	
Half-moon Bay and Horsehoe Bay(f) ...	55 18 11	...	55 18 11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Havelock ...	129 13 2	33 0 0	162 13 2	253 13 0	416 6 2	203 1 3	40 10 4	...	(e)250 0 0	583 11 7	325 1 7	...	...	...	...	...	...	...	...	
Hokitika ...	214 0 4	835 2 5	1,049 2 9	4,249 15 5	5,288 18 2	435 0 1	47 1 2	...	...	908 2 4	3,060 13 6	...	...	...	...	...	...	...	...	
Kaikoura (h) ...	995 11 11	235 7 2	1,230 10 1	3,010 6 3	4,241 5 4	1,224 12 1	98 15 3	...	(g)3,000 0 0	4,323 7 5	276 1 6	...	...	...	...	...	...	...	...	
Kawhia (i) ...	202 5 3	87 15 0	290 0 3	1,950 0 0	2,240 0 3	200 15 1	181 18 3	...	(h)1,977 1 0	2,350 15 2	2,029 9 1	...	...	...	...	...	...	...	...	
Lyttelton ...	56,779 5 3	3,695 10 3	60,474 15 6	237 10 2	60,732 5 8	49,451 19 2	18,830 14 10	...	...	68,282 14 0	269,952 10 3	...	...	...	...	...	...	...	...	
Mokai ...	126 1 10	111 7 1	237 8 11	...	...	237 8 11	234 14 10	11 5 0	...	265 19 10	15 0 0	...	...	...	...	...	...	...	...	
Moukai ...	874 0 2	6 10 7	970 10 9	500 0 0	1,470 10 9	567 2 9	212 13 11	...	...	779 16 8	28 0 0	...	...	...	...	...	...	...	...	
Napier ...	33,291 9 2	25,775 8 1	59,066 17 3	...	...	59,066 17 3	40,071 3 10	23,035 6 10	...	65,706 10 8	519,481 16 2	...	...	...	...	...	...	...	...	
Nelson ...	3,865 14 2	27 2 2	3,892 16 4	2,353 15 7	6,186 12 11	1,519 15 4	2,527 6 8	...	(i)2,179 0 0	6,226 2 0	59,561 9 9	...	...	...	...	...	...	...	...	
New Plymouth ...	10,063 5 11	8,934 8 4	18,997 11 3	142,379 7 6	161,377 1 9	5,068 8 2	6,424 8 11	...	(j)49,602 19 2	61,635 16 3	277,794 3 2	...	...	...	...	...	...	...	...	
New River(k) ...	1,308 18 2	230 7 9	1,539 5 11	418 18 9	1,948 4 8	508 19 0	1,364 11 5	...	...	1,845 10 5	17,752 7 6	...	...	...	...	...	...	...	...	
Oamaru ...	7,941 0 6	12,857 16 0	20,798 16 6	1,244 6 7	22,043 3 1	4,087 7 6	9,501 0 2	...	(k)8 11 5	13,636 19 1	378,591 3 6	...	...	...	...	...	...	...	...	
Otago ...	68,082 11 0	11,508 13 4	79,591 4 4	37,912 3 1	117,503 7 5	36,164 18 3	66,241 2 2	...	(l)20,387 13 4	129,483 13 9	782,543 3 7	...	...	...	...	...	...	...	...	
Patea ...	2,908 15 4	634 5 4	3,543 0 8	131 13 2	3,644 13 10	3,436 8 3	1,383 17 1	...	...	4,820 5 4	930,511 0 8	...	...	...	...	...	...	...	...	
Port Molyneux(l) ...	...	...	...	...	468 5 0	66 19 8	100 19 3	...	...	167 18 11	1,900 0 0	...	...	...	...	...	...	...	...	
Riverton ...	99 17 1	368 7 11	468 5 0	...	1,926 8 8	1,077 17 10	742 5 4	...	...	1,820 3 2	10,095 15 3	...	...	...	...	...	...	...	...	
Thames ...	1,676 18 8	249 5 0	1,925 3 8	...	37,097 1 8	18,157 1 7	15,919 10 0	...	(m)8,928 5 0	43,004 16 7	328,867 13 5	...	...	...	...	...	...	...	...	
Tinianu ...	27,124 14 1	9,942 7 7	37,067 1 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Tokomaru Bay ...	...	...	...	...	228 16 0	315 2 2	418 12 2	...	...	231 14 4	922 10 0	...	...	...	...	...	...	...	...	
Tolaga Bay ...	238 16 0	...	238 16 0	15 0 0	228 16 0	190 8 3	41 6 1	...	...	231 14 4	922 10 0	...	...	...	...	...	...	...	...	
Waikohu ...	103 10 0	815 2 2	418 12 2	...	...	...	...	...	...	573 7 10	2,160 8 1	...	...	...	...	...	...	...	...	
Waimakariri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

[illegible]

(a) Including Admiralty subsidy, £3 000.

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Harbour Board,

(j) Public works.

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DO NOT TRY TO

LOANS OF LOCAL BODIES.

In a table on the next page will be found a summary of the amounts raised by loan, classified according to the rates of interest paid, distinguishing loans raised in New Zealand from those raised abroad. It will be noticed that the amount raised abroad (£6,970,300) is now less than that raised in New Zealand (£7,967,385). Figures for twenty consecutive years on page 164 show that the operations have been such as to leave the total outside indebtedness somewhat more in March, 1910, than it was in 1909, while on the other hand the inside indebtedness has increased steadily. The lowest rate of interest paid in 1910 was 3 per cent., but the large sum of £3,183,308 was raised at 5 per cent., and £1,476,125 at 6 per cent., while £62,000 bore interest as high as 7 per cent.

LOANS OF LOCAL BODIES, MARCH, 1910.—NET INDEBTEDNESS AND ANNUAL CHARGE.

				Amount of Debentures and Stock in Circulation.	Amount of Accrued Sinking Fund.	Net Indebtedness.	Annual Charge (excluding Exchange and Commission).		
							Interest.	Sinking Fund.	Total.
Counties ..	..	..	..	£ 76,877	£ 2,711	£ 74,166	£ 3,558	£ 1,004	£ 4,562
Boroughs ..	..	..	..	7,687,209	484,676	7,202,533	346,505	47,778	394,283
Town Boards ..	..	..	..	38,089	562	37,527	1,807	250	2,057
Road Boards ..	..	..	..	80,040	1,917	78,123	3,461	412	3,873
River Boards ..	..	..	..	27,350	4,347	23,003	1,300	564	1,864
Land Drainage Boards ..	..	..	..	17,020	182	16,838	861	..	861
City and Suburban Drainage Boards ..	..	..	..	764,500	82,559	681,941	36,698	2,266	38,964
Water-supply Board ..	..	..	..	21,200	4,435	16,765	1,015	200	1,215
Christchurch Tramway Board ..	..	..	..	437,000	8,972	428,028	18,710	2,182	20,892
Harbour Boards ..	..	..	..	5,788,400	581,522	5,206,878	270,715	43,317	314,032
Totals ..	..	..	..	14,937,685	1,171,883	13,765,802	684,630	97,973	782,603
Inscribed debt of Local Bodies under the Loans to Local Bodies' Loans Acts (including inscribed stock exchanged for debentures under the Roads and Bridges Construction Act, 1882) ..	..	..	..	1,925,606*	..	1,925,606*	..	..	112,456
Totals ..	..	..	..	16,863,291	1,171,883	15,691,408	..	..	895,059

* Repayable by annual instalments of £112,456, representing 4½ per cent. per annum on £1,145,689, 4 per cent. per annum on £94,200 and 3½ per cent. per annum on £1,682,344, the amount inscribed to 1st February, 1910. Repayments on the amount inscribed (£2,872,233), including £89,878 debentures under the Roads and Bridges Construction Act, exchanged) would be £3,803,445. The actual repayments to date are £1,118,740 leaving £2,684,704 to be paid by way of interest and sinking fund, on a present indebtedness of £1,925,606.

LOANS OF LOCAL BODIES, RAISED WITHIN AND WITHOUT THE DOMINION.

TABLE showing the Amount of Indebtedness of Counties, Boroughs, Town, Road, River, Land Drainage, City and Suburban Drainage, Water-supply Boards, and Christchurch Tramway Board, as on the 31st March, 1910, and of Harbour Boards as on the 31st December, 1909, classified according to the Rates of Interest paid, distinguishing Loans raised in New Zealand from those raised elsewhere. (See note.)

Local Bodies.	No Int.	3%	3½%	3½%	4%	4½%	4½%	4½%	5%	5½%	6%	7%	Total.
<i>Loans raised in the Dominion.</i>													
Counties	£	£	£	£	£	£	£	£	£	£	£	£	£
Boroughs	25,000	28,500	16,206	1,400	125,500	37,000	53,700	121,550	19,888	1,839*	155,785‡	2,000	76,877
Town Boards	..	..	..	1,525,690	..	..	2,151,143	..	396,535	35,000†	..	..	4,519,909
Road Boards	..	..	..	13,900	5,000	..	20,554	..	17,035	..	500	..	38,089
River Boards	..	..	..	8,200	..	..	..	..	6,100	..	40	..	80,040
Land Drainage Boards	..	..	..	..	..	..	18,000	..	650	..	500	..	22,350
City and Suburban Drainage Boards	..	..	..	25,000	32,100	..	..	..	15,100	1,920	..	..	17,020
Water-supply Board	..	..	..	..	..	..	407,400	..	12,200	..	..	..	464,500
Christchurch Tramway Board	..	..	..	..	382,000	..	9,000	..	..	..	..	..	21,200
Harbour Boards	..	..	..	60,000	988,780	345,900	313,770	..	478,950	28,000	..	..	417,000
Total raised in Dominion	25,000	28,500	16,206	60,000	2,552,970	870,500	3,083,567	121,550	946,508	66,759†	156,825‡	2,000	7,967,385

Loans raised outside the Dominion.

Counties	..	..	..	..	..	..	..	..	..	..	..	..	..
Boroughs	..	..	..	1,868,500	238,700	..	210,000	..	593,300	35,000	552,800	60,000	3,067,300
City and Suburban Drainage Boards	..	..	..	100,000	..	..	..	..	..	..	5,000	..	5,000
Christchurch Tramway Board	..	..	..	..	20,000	..	..	..	..	..	200,000	..	300,000
Harbour Boards	..	..	..	300,000	538,000	..	535,000	..	1,643,500	..	561,500	..	20,000
Total raised outside Dominion	..	..	..	1,768,500	796,700	..	754,000	..	2,236,800	35,000	1,319,300	60,000	3,578,000
Total	..	..	..	..	..	..	..	..	..	..	..	..	6,970,300

Total Loans raised.

Counties	..	..	..	1,400	364,200	37,000	53,700	121,550	19,888	1,839*	708,585‡	62,000	76,877
Boroughs	25,000	28,500	16,206	2,894,190	..	..	2,370,143	..	989,835	70,000†	500	..	7,087,209
Town Boards	..	..	..	13,900	5,000	..	20,554	..	17,035	..	500	..	38,089
Road Boards	..	..	..	3,200	..	..	55,000	..	6,100	..	40	..	80,040
River Boards	..	..	..	..	..	..	18,000	..	650	..	5,500	..	27,350
Land Drainage Boards	..	..	..	125,000	32,100	..	407,400	..	15,100	1,920	..	..	17,020
City and Suburban Drainage Boards	..	..	..	..	..	..	9,000	..	..	..	200,000	..	764,500
Water-supply Board	..	..	..	..	382,000	..	55,000	..	12,200	..	..	..	21,200
Christchurch Tramway Board	..	..	..	60,000	888,900	..	848,770	..	2,122,450	28,000	561,500	..	437,000
Harbour Boards	..	..	..	..	..	..	..	..	..	..	..	..	5,786,400
Total loans raised	25,000	28,500	16,206	60,000	4,321,470	1,667,200	3,837,567	121,550	3,183,808	101,759†	1,476,125‡	62,000	14,937,685

* Including £900 at 5½ per cent.

† Including £18,000 at 5½ per cent.

‡ Including £18,900 at 5½ per cent.

§ Including £3,000 at 5½ per cent.

NOTE.—Not including loans, amounting to £1,925,606, repayable by instalments, under the Roads and Bridges Construction Act, the Government Loans to Local Bodies Act, and the Loans to Local Bodies Acts.

INDEBTEDNESS AND INTEREST CHARGE OF LOCAL BODIES, EXCLUDING GOVERNMENT LOANS.

Year ended 31st March.	Indebtedness.	Interest.	Average Rate.
	£	£	£
1893	6,203,869	340,583	5·49
1894	6,614,824	357,135	5·40
1895	6,685,510	358,292	5·36
1896	6,737,578	361,306	5·36
1897	6,793,398	363,352	5·35
1898	6,834,361	363,569	5·32
1899	6,963,254	363,915	5·23
1900	7,057,350	367,019	5·20
1901	7,563,069	385,959	5·10
1902	7,839,695	396,460	5·06
1903	8,217,196	409,238	4·91
1904	8,898,910	439,879	4·94
1905	10,018,242	487,145	4·86
1906	10,718,051	515,188	4·81
1907	11,616,048	548,387	4·72
1908	12,532,334	587,564	4·69
1909	13,303,622	616,330	4·63
1910	14,937,685	684,630	4·58

GROSS LOAN INDEBTEDNESS OF LOCAL BODIES.

Year ended 31st Mar.	Raised in New Zealand.	Raised Abroad.	Borrowed from Government.	Total.
	£	£	£	£
1890 ..	908,609	5,069,450	338,657	6,316,716
1891 ..	985,114	5,057,579	384,780	6,427,473
1892 ..	1,027,484	5,054,450	468,249	6,550,183
1893 ..	1,129,719	5,074,150	546,049	6,749,918
1894 ..	1,198,774	5,416,050	550,364	7,165,188
1895 ..	1,261,960	5,423,550	623,918	7,309,428
1896 ..	1,276,503	5,461,075	668,893	7,406,471
1897 ..	1,336,698	5,456,700	710,359	7,503,757
1898 ..	1,343,161	5,491,200	743,242	7,577,603
1899 ..	1,478,154	5,485,100	789,965	7,753,219
1900 ..	1,579,050	5,478,300	810,192	7,867,542
1901 ..	2,052,269	5,510,800	902,769	8,465,838
1902 ..	2,287,595	5,552,100	1,046,645	8,886,340
1903 ..	2,880,596	5,336,600	1,266,002	9,483,198
1904 ..	3,369,410	5,529,500	1,401,752	10,300,662
1905 ..	3,479,642	5,633,600	1,526,353	10,644,595
1906 ..	5,250,551	5,467,500	1,580,494	12,298,545
1907 ..	6,145,548	5,470,500	1,647,273	13,263,321
1908 ..	7,246,834	5,285,500	1,691,083	14,223,417
1909 ..	7,785,922	5,517,700	1,839,017	15,142,639
1910 ..	7,967,385	6,970,300	1,925,606	16,863,291

From the above tables it will be seen that the total amount owing was, on the 31st March, 1910, £14,937,685. But, against this, accrued sinking funds to the value of £1,171,883 were held,

leaving a net debt of £13,765,802, exclusive of moneys borrowed from the General Government and repayable by annual instalments.

The total annual charge (excluding exchange and commission) stood at £782,603, of which £684,630 was for interest, and the remainder, £97,973, contributions to sinking fund accounts.

Of the total net indebtedness in 1909-10 the debt of the Borough Councils, £7,202,533, formed the largest item, while the Harbour Boards owed £5,206,878.

On referring to the comparative table on the previous page, a great advance in the outstanding loans of local governing bodies will be noticed. Between 1901 and 1910 the gross indebtedness increased from £8,465,838 to £16,863,291, an addition of £8,397,453 or 99 per cent. during the ten years. During the same period the population advanced at the rate of 30 per cent., and the value of land and improvements (1898-1910) from £138,591,347 to £277,630,033, or at the rate of 100 per cent. in thirteen years.

The aggregate interest-charge for the year under review was £684,330, and £335,652 of this was payable on loans raised outside the Dominion. The average rate of interest payable to bondholders was £4 11s. 7d. per cent. These figures do not include interest payable on loans from Government.

While the average rate of interest on the above-mentioned debt is found to be less than 5 per cent., over three millions were raised at 5 per cent., and one million and a half at 6 per cent. or over.

THE LOCAL BODIES' LOANS ACTS.

The Local Bodies' Loans Act, 1908, empowers local authorities to raise special loans for and in connection with the construction of public works or the establishment or purchase of any business which they may legally undertake. The consent of the ratepayers must first be obtained by means of a poll, and a majority of three-fifths of the total number of valid votes recorded is required to carry the proposal, except in the case of a borough, when a bare majority will suffice.

There are, however, certain loans for which a poll need not be taken, such a loan raised for repayment of overdraft or other liabilities lawfully incurred for any purpose for which a special loan may be raised; for redemption, conversion or consolidation of existing loans; for undertakings authorized by special Acts; or where a majority of the ratepayers in number and in capital value of property of any district containing not more than one hundred ratepayers consent in writing to the proposal. As security for repayment of principal and interest a local authority may pledge all or any of its property, revenues or funds, excepting Government grants, and must levy an annually recurring special rate to provide for interest or interest and sinking fund. In certain cases the annual charge may be paid out of the general fund.

Where a loan is raised for the benefit of any particular portion or legal subdivision of a local district, the special rate may be levied on the rateable property within such portion or subdivision only.

Loans are raised by issue of debentures bearing interest at a rate not exceeding 5 per cent. per annum, the debentures to be in form as set out in a schedule to the Act.

Special provision is made for borrowing by local authorities of mining districts. Loans may be raised for public works within a mining district, and a special rate on all mining privileges not already rateable must be levied as security for the annual charge. Goldfield revenue may be pledged as collateral security. If the work proposed is the supply of water the sum raised in any one year must not exceed £15,000.

The Local Bodies' Loans Amendment Act, 1908, provides that after the passing of this Act, in respect of every loan raised under the principal Act by a local authority, the Public Trustee shall be the Commissioner of the sinking fund, and he shall, at his own discretion, invest the money of the fund in securities issued by the Government of New Zealand, and not in securities of any other kind.

Under the provisions of the New Zealand State-guaranteed Advances Act, 1909, and the New Zealand State-guaranteed Advances Amendment Act, 1910, a local body may, after taking the necessary steps in compliance with the Local Bodies' Loans Act, 1908, and the amendments thereto, obtain a loan from the State Advances Department for a period not exceeding fifty years, interest and principal to be paid by half-yearly instalments. The sums so raised shall bear interest at such rate (not exceeding $4\frac{1}{2}$ per cent. per annum) as the Minister prescribes.

Prior to taking the necessary formal steps to raise a loan the local body may make preliminary application to the Board in order to ascertain if the amount would be granted and if the terms proposed are suitable, and the Board may approve or reject such application or propose other terms at its discretion. A provisional approval shall not constitute an agreement on the part of the Board to grant any loan nor affect its right to impose any conditions on the grant. Such provisional approval shall lapse unless an application for the loan so approved is made within six months of the date of approval.

A commission fee of one half per cent. shall be payable to the Superintendent of the Advances Department by the local authority to whom the loan is granted, to cover administration expenses. Payment of interest and principal must be secured by a special rate calculated to produce an amount ten per cent. greater than the periodical payments as they fall due.

The provisions of the Amendment Act of 1908 in respect of sinking funds do not apply to loans granted to local authorities by the Advances Board.

MUNICIPAL FRANCHISE.

The Municipal Corporations Act, 1903, and the Municipal Corporations Amendment Act, 1910, deals with the franchise in the case of boroughs, and provides that, in addition to the persons who are already entitled to be enrolled, every person shall be so entitled who possesses the freehold or residential qualifications stated in the Act.

The possession of the freehold qualification is defined as being the beneficial and duly registered owner of a freehold estate in land of the capital value of not less than £25, situated in the borough, notwithstanding that any other person is the occupier thereof, or part thereof, under any tenancy.

A rating qualification may be possessed by any person whose name appears for the time being as the occupier of any rateable property within the borough.

Every person is deemed to possess a residential qualification within a borough if he has resided for one year in New Zealand, and has resided in the borough or in the ward of a divided borough during the three months then last past, and is a British subject, either by birth or naturalization in New Zealand, or has been for at least three months last past a residential occupant within such borough as a tenant of a tenement the rental of which is not less than £10 per annum, or as a subtenant or joint tenant of a tenement the rental of which is at the rate of not less than £10 per year for each of the several subtenants or joint tenants.

No person may be entered in the burgess lists in respect of more qualifications than one; but any person who has more than one qualification may select the one in respect of which he wishes to be entered.

In the case of husband and wife, any qualification possessed by one of them is deemed to be possessed by each.

No person enrolled on a burgess roll has more than one vote, and no person enrolled by virtue of the residential qualification can vote on any proposal relating to loans or rates.

LOCAL AUTHORITIES SUPERANNUATION FUNDS.

An Act of the General Assembly, passed in 1903, authorizes any local authority to establish a superannuation fund for the benefit of its employees. Two or more bodies, whether of the same or different descriptions, may unite for this purpose. The Act prescribes the method by which the fund may be established, scale of contributions, and the computation of retiring-allowances. The solvency of every fund must be guaranteed by the local authority or authorities establishing the same, and the funds are to be vested in the Public Trustee. Statements of accounts and membership must be submitted to Parliament annually, and an actuarial examination of the fund made every third year of its existence. Subject to regulations made by Order in Council, every fund shall be administered by the local authority by which it is established.

SUBSIDIES TO LOCAL AUTHORITIES.

By annual appropriation of Parliament a subsidy is paid out of the Consolidated Fund to the local authority of each county, road district, and town district in respect of the general rates (exclusive of rates payable by Natives) levied for the year ending on the 31st March, and actually collected on or before the 30th June ensuing next after the expiry of that year, according to the following scale :—

Counties.

Wherein there are no road districts—

Not exceeding £1,000 ... 10s. in the pound.

Exceeding £1,000 ... 5s. in the pound.

Provided in the latter case no lesser sum than £500 nor greater sum than £2,500 shall be paid in any one year.

Wherein there are road districts—

Not exceeding £500 ... 10s. in the pound.

Exceeding £500 ... 5s. in the pound.

Provided in the latter case no lesser sum than £250 nor greater sum than £500 shall be paid in any one year.

If the Counties Act is not in full force within a county, this subsidy is paid to the Board of each road district; if the Act is in full force, then the subsidy is paid to each Road Board and to the County Council in equal parts. If any road district does not collect rates the county, if it collects rates within such district, may claim the subsidy on its behalf.

Subsidy is paid to a County Council on general rates collected on such portions of the county as lie outside of road or town districts—

Not exceeding £500 ... 10s. in the pound.

Exceeding £500 ... 5s. in the pound.

Provided in the latter case no lesser sum than £250 nor greater sum than £500 shall be paid in any one year.

No greater sum in all than £2,500 shall be paid in any year in respect of any county and its road districts.

Town Districts.

When the general rates collected do not exceed £750 ...

5s. in the pound.

When the general rates collected exceed £750 ...

2s. 6d. in the pound.

Provided in the latter case no lesser sum than £187 10s. nor greater sum than £450 shall be paid in any one year.

Boroughs.

By authority of the Municipal Corporations Act, subsidies are paid annually to Borough Councils in respect of general rates, as follows :—

Not exceeding £750 ... 5s. in the pound.

Exceeding £750 ... 2s. 6d. in the pound.

In the latter case no lesser sum than £187 10s. nor greater sum than £450 shall be payable in any one year.

No subsidy is paid on any part of general rates expended by Borough Councils in contributing to the funds of any other local authority not receiving subsidy.

Upon application, any local authority may be granted an advance of 75 per cent. of the subsidy payable on the amount of rates collectible for the year then current.

Where any local authority has adopted the system of rating on the capital value or the unimproved value, no subsidy shall be paid on any amount collected which exceeds the product of a rate of $\frac{3}{4}$ d in the pound on the capital value of rateable property. If the rate is levied on the annual value, no subsidy shall be paid on any amount exceeding that produced by a rate of 1s. in the pound.

RATING-POWERS OF LOCAL AUTHORITIES.

System of Rating.

The system of rating is upon the basis that 1s. in the pound on the annual value is deemed to be equivalent to $\frac{3}{4}$ d. in the pound on the capital value of any rateable property, or that the annual value of any rateable property is equal to 6 per cent. on the capital value of such property. Rating on the unimproved value must be so adjusted as to equal as nearly as may be, but not to exceed, in producing-capacity, the limit of rating-power on the capital or annual value, as the case may be.

The system of rating on the unimproved value does not apply to water rates, gas rates, electric-light rates, sewage rates, or hospital and charitable-aid rates, which may be levied on the annual or capital value only.

Rateable Value.

The annual value is deemed to be the letting-value less 20 per cent. in case of houses, buildings, and other perishable property, and 10 per cent. of land, but in no case less than 5 per cent. of the value of the fee-simple. The capital value is deemed to be the selling-value of the land, including improvements, at the time of valuation. The unimproved value is deemed to be the selling-value of the land at the time of valuation, excluding the value of any existing improvements.

MAXIMUM RATING-POWER.

Boroughs.

General Rate.—Two shillings in the pound on the annual or $1\frac{1}{2}$ d. in the pound on the capital value of all rateable property, or its equivalent on the unimproved value. In divided boroughs the rate levied may vary in different wards, but must not in any case exceed the above limit.

Separate Rates for Special Works.—Three-farthings in the pound in any one year on capital, or 1s. in the pound on the annual, or its equivalent on the unimproved, value of the rateable property.

Water-supply.—Ordinary supply 10s. per annum where the annual value does not exceed £12 10s., 7 per cent. on the first £100 in excess of £12 10s., 6 per cent. on the second £100 of such value, 5 per cent. on the third £100, and 4 per cent. on so much of such value as exceeds £300. Half-rates on stores or warehouses, and all land and buildings to which water can be but is not supplied, situate within 100 yards from any part of the waterworks. The rate or charge for extraordinary supply may be fixed by the Council.

Lighting Streets and Public Buildings.—Sixpence in the pound on the annual value.

Sanitation.—Sixpence in the pound on the annual value, or a uniform annual fee may be levied in lieu of a rate, provided the total proceeds of such fee shall not exceed the proceeds of such rate.

Library.—One penny in the pound on the annual value.

Hospital and Charitable Aid.—A rate sufficient to produce the amount of the contribution for which the borough may be liable.

Harbour.—Any Council appointed a Harbour Board may, for the purpose of constructing or maintaining harbour-works, levy a rate not to exceed in any one year $\frac{2}{3}$ d. in the pound on the capital value.

Special rates for the purpose of producing interest, or interest and sinking-fund, upon any special loan are not limited by statute. No special loan may be raised without the consent of a majority of the ratepayers affected.

Counties.

General Rate.—In counties where there are no road or town districts 3d. in the pound, or where there are road or town districts 3d. in the pound in outlying districts, and in all other parts of the county 1 $\frac{1}{4}$ d. in the pound on the capital value of rateable property, or its equivalent on the unimproved or annual value.

Separate Rates within any Riding of the County or within such portion of the County as is defined in a Special Order.—The total amount of general and separate rates together must not exceed the amount of the maximum general rate.

Special Works Rates.—Three-farthings in the pound on the capital value or its equivalent as aforesaid.

Sanitation.—One halfpenny in the pound on the capital value, or a uniform annual charge the total proceeds of which must not exceed the total product of such rate.

Water-supply.—A County Council undertaking the supply of water for purposes of irrigation or domestic use has power to levy special rates for payment of interest on and repayment of money borrowed for such purpose, and such rates may be levied either on a uniform scale or graduated according to the classification of lands. A fixed charge may be made for water supplied, and such charge may be estimated to cover interest and sinking fund on loans.

Drainage.—Three-halfpence in the pound on the capital value or its equivalent over the whole or any part of the county, to secure interest and repayment of money borrowed.

Harbour—A Council exercising the powers of a Harbour Board may levy special rates for the construction and maintenance of harbour-works, such rate not to exceed in any one year $\frac{3}{4}$ d. in the pound on the capital value or its equivalent.

Bridge Rate, for Reconstruction of Bridges.—One farthing in the pound on the capital value of all rateable property in the whole or any part of the county.

Library.—One penny in the pound on the annual value or its equivalent in cases where the library is managed by the Council.

Hospital and Charitable Aid.—A rate sufficient to produce the amount of the contribution for which the county may be liable.

Special rates to provide interest, or interest and sinking fund, on loans are not limited by statute as to amount.

Road Boards.

General Rate.—Three-halfpence in the pound on the capital value or its equivalent on the unimproved value, or 2s. in the pound on the annual value, as the case may be. In the event of a receiver being appointed, the power is extended by $\frac{3}{8}$ d. in the pound if the Counties Act is suspended, or $\frac{3}{16}$ d. in the pound if the Act be in force, upon the capital value.

Separate Rates (in Subdivided Road Districts).—May be levied over any or every subdivision of the district, but must not, together with the general rate, exceed the limit of $1\frac{1}{2}$ d. in the pound on the capital value or its equivalent.

Special Rates for Particular Works.—Three-farthings in the pound on the capital value over the whole or any portion of the district.

Water-supply for Domestic Use.—According to the scale prescribed by the Municipal Corporations Act for boroughs. This applies only to certain Road Boards specially authorized.

Irrigation.—Where the Counties Act is not in operation or suspended, two or more adjoining road districts may amalgamate for the purpose of forming a water-supply district with the full rating-powers of such districts. Any Road Board which had constructed water-races or irrigation-works prior to 1891 may continue to exercise in this respect the same rating-powers as a County Council.

Library.—One penny in the pound on the annual value or its equivalent. Only where the public library is managed by the Road Board.

Hospital and Charitable Aid.—A rate sufficient to produce the amount of the contribution for which the Board may be liable.

Harbour.—Should a Road Board be declared a Harbour Board it may, by consent of the ratepayers, levy a special rate for the construction or maintenance of harbour-works, such rate not to exceed in any one year $\frac{3}{4}$ d. in the pound on the capital value or its equivalent.

Special rates to provide interest, or interest and sinking fund, on loans are not limited by statute as to amount.

Town Boards.

General Rate.—Three-halfpence in the pound on the capital value, or its equivalent on the unimproved value, or 2s. in the pound on the annual value.

Separate Rate.—For special works in any particular portion of the district, not to exceed 1s. in the pound on the annual value, or its equivalent, in any such portion.

Library.—One penny in the pound on the annual value or its equivalent. Only where the public library is managed by the Town Board.

Hospital and Charitable Aid.—A rate sufficient to produce the amount of the contribution for which the Board may be liable.

Special rates for interest, or interest and sinking fund, on loans may be levied in the same manner as for boroughs.

Harbour Boards.

For any purpose connected with a harbour, or for interest, or interest and sinking fund, on loans, a rate not to exceed $\frac{3}{4}$ d. in the pound on the capital value, or its equivalent on the annual or unimproved value.

Water-supply Boards.

Special rates—not limited by statute as to amount—for payment of interest and to provide for the redemption of loans, may be levied either upon a uniform scale or graduated according to the classification of lands. A fixed charge, estimated to cover interest and sinking fund on loans, may be made for water supplied.

Drainage or Irrigation Boards.

General Rate.—Three-halfpence in the pound on the capital value or its equivalent, leviable either on a uniform scale or graduated according to the classification of lands in the district.

Special rates—not limited by statute as to amount—may be levied to secure the interest and provide a fund for the repayment of loans.

River Boards.

General Rate.—Three-halfpence in the pound on the capital value or its equivalent, leviable either on a uniform scale or graduated according to the classification of lands in the district.

Separate rates shall not, together with the general rates levied, exceed the amount limited in respect to general rates.

Special rates—not limited by statute as to amount—may be levied to secure the interest and provide a fund for the repayment of loans.

Fire Boards.

Borough Councils, County Councils, Road or Town Boards within a fire district may, in order to raise the amount required to be contributed to the Fire Board, levy a separate rate, on the value of the buildings only, within the fire district.

Rabbit Boards.

General Rate.—Three-sixteenths of a penny in the pound on the capital value or its equivalent of all rateable property within the rabbit district, the proceeds of such rate to be expended in the destruction of rabbits.

Rabbit-proof Fencing Boards.

General Rate.—One farthing in the pound on the capital value of all rateable property in the district under the control of the Board.

Special rates—not limited by statute as to amount—may be levied to secure the interest and provide for repayment of loans.

Small Birds Nuisance.

Borough Councils, County Councils, Town Boards, and Road Boards in counties where the Counties Act is suspended or not in force, are empowered to raise funds for the destruction of injurious birds by levying a general rate not exceeding $\frac{1}{8}$ d. in the pound on the capital value or its equivalent on the annual or unimproved value.

Public Health.

A separate rate not exceeding $\frac{1}{8}$ d. in the pound on the capital value or its equivalent may be levied by any local authority over the whole or any portion of the district, for payment of expenses incurred in carrying out the provisions of the Public Health Act.

Recurring Rate.

Where the local authority is authorized to make a special rate providing for the annual or half-yearly charges on a loan, such special rate shall be made a continuing rate for a period of years equal to the currency of the loan.

Increase of Rating-power authorized where Revenue lost in consequence of the Reduction or Prohibition of Licenses.

Every local authority which suffers loss of revenue from license fees under the Licensing Act, in consequence of the reduction or

prohibition of licenses in the district, may make good such loss by an equivalent sum to be levied and collected by an increase of the general rate in the district.

Rates on Native Lands.

The full amount of rates (including special) may be levied on Native land—

- (a.) Of which there is a European occupier ;
- (b.) That is situate in a borough or town district or within ten miles of any part thereof ;
- (c.) That is situate within five miles of any Government or county road ;
- (d.) That has been at any time acquired by purchase, lease, or in any other way for valuable consideration from any person or from the Crown ;
- (e.) That has at any time been liable for full rates ;
- (f.) That is incorporated under Part II of Division II of the Native Land Court Act, 1894.

All other Native land shall, if the title thereto has been ascertained, be liable for half the amount of the rates levied, or, if the title has not been ascertained, shall be exempt from all rates.

Rating of Mining Property in the South Island.

All mining property held by an occupier in any borough, town district, or county within a mining district in the South Island is liable to be rated by the local authority in the same manner as other rateable property in the district, but subject to special provisions of the Rating Act, 1908.

RATING ON UNIMPROVED VALUE.

A special article on this system of rating (which it is optional with local governing bodies to adopt or not) is given in Part III of this issue.

The results, as shown by notifications in the *New Zealand Gazette*, of proposals to levy rates on the unimproved value of land are given in full.

TABLE SHOWING THE RESULT OF POLLS TAKEN ON THE PROPOSAL TO RATE
ON THE UNIMPROVED VALUE, TO 31ST MARCH, 1911.

	Date of Poll.	Result of Poll.	Votes recorded		
			For	Against.	Informal.
Akitio County	16 Feb., 1905	Carried ..	112	32	3
Ashburton Borough	14 Jan., 1903	Rejected ..	102	199	4
Auckland City	7 Aug., 1901	" ..	753	1,697	..
Avenal Borough	7 Dec., 1904	Carried ..	48	10	2
Awatere Road District	3 May, 1905	" ..	146	8	..
Awitu Road District	25 Jan., 1907	" ..	23	15	1
Balclutha Borough	7 July, 1902	" ..	60	33	..
Birkenhead Borough	9 Feb., 1910	Rejected ..	193	248	3
Blenheim Borough	17 June, 1903	Carried ..	224	64	..
Buller County	10 Sept., 1904	" ..	302	84	5
Campbelltown Borough	14 Sept., 1904	" ..	101	86	6
Castlepoint County	8 Nov., 1905	" ..	56	45	..
" (a)	" ..	" ..	41	19	..
Cheviot County	6 Oct., 1898	" ..	165	41	..
Christchurch City	30 June, 1902	" ..	596	512	..
Clyde Town District	22 Feb., 1907	" ..	68	12	1
Dannevirke Borough	27 Feb., 1907	" ..	308	94	13
Devonport Borough (b)	30 Oct., 1900	" ..	356	109	..
Eastbourne Borough	8 Aug., 1906	" ..	78	24	..
Eketahuna Borough	16 Sept., 1907	" ..	88	9	..
Eketahuna County	1 Feb., 1900	" ..	149	21	1
Featherston Town Board	11 May, 1908	" ..	101	14	1
Feilding Borough	16 April, 1901	" ..	268	56	1
Foxton Borough	20 June, 1902	Rejected ..	53	98	4
"	" ..	Carried ..	104	36	3
Franklyn Town District	1 Feb., 1911	" ..	70	14	3
Gisborne Borough	2 Feb., 1911	" ..	474	279	..
Gore Borough	7 July, 1901	" ..	122	67	5
Grey Lynn Borough	20 Mar., 1901	" ..	140	71	2
Greymouth Borough	23 Feb., 1898	" ..	214	48	1
Hamilton Borough (c)	13 Feb., 1901	" ..	77	52	..
Hastings Borough	14 July, 1902	Rejected ..	250	265	15
"	30 Aug., 1905	" ..	314	374	21
"	11 Feb., 1909	Carried ..	323	246	6
Hawera Borough (d)	8 April, 1903	" ..	129	9	1
Heathcote Road District	14 Mar., 1905	Rejected ..	135	403	14
Hobson County	14 Feb., 1905	Carried ..	227	196	8
Hokianga County	11 Mar., 1899	" ..	109	25	6
Hokitika Borough	5 May, 1901	" ..	212	53	1
Hunua Road District	5 April, 1899	" ..	60	2	..
Inangahua County	14 May, 1898	" ..	284	11	2
Invercargill Borough (e) (f)	5 June, 1901	" ..	386	174	4
Kaipoi Borough	7 Sept., 1905	Rejected ..	83	251	16
Kairanga County	14 Jan., 1905	Carried ..	142	54	2
Karori Borough	4 April, 1898	" ..	93	3	1
Kawhia County	21 Nov., 1905	" ..	96	7	..
Linwood Borough (g)	30 May, 1901	" ..	276	38	2
Lower Hutt Borough	12 Oct., 1901	" ..	94	68	4

(a) For rescission. (b) Proposal to rescind the adoption of the Act rejected. Poll taken 6th June, 1904. For rescission, 176; against, 415; informal, 6. (c) Proposal to rescind the adoption of the Act rejected. Poll taken 3rd May, 1904. For rescission, 116; against, 148. (d) Proposal to rescind. Poll taken 28th August, 1907. For rescission, 108; against, 161; informal, 5. Proposal rejected. (e) Proposal to rescind. Poll taken 4th May, 1906. For rescission, 300; against, 462. Proposal rejected. (f) Proposal to rescind the adoption of the Act rejected. Poll taken 28th June, 1909. For rescission, 219; against, 373; informal 14. (g) Now part of Christchurch City.

TABLE SHOWING THE RESULT OF POLLS TAKEN, ETC.—*continued.*

	Date of Poll.	Result of Poll.	Votes recorded.		
			For.	Against.	Informal.
Mackenzie Town District ..	19 Feb., 1910	Carried ..	14	3	..
Manawatu Road District ^(a) ..	6 Jan., 1900	" ..	105	10	..
Maori Hill Borough ..	25 Jan., 1904	" ..	119	27	..
Maraetai Road District ..	2 June, 1900	" ..	16	..	..
Mareketu Road District ^(b) ..	28 June, 1902	" ..	24	..	..
Masterton Borough ..	29 Aug., 1901	" ..	221	139	6
Masterton County ..	1 Sept., 1906	Rejected ..	243	245	3
Matamata County ..	13 Nov., 1909	" ..	156	271	8
Mataura Borough ..	27 Mar., 1907	" ..	17	58	1
Mauku Road District ..	2 July, 1904	" ..	23	39	1
Melrose Borough ^(c) ..	3 Mar., 1898	Carried ..	236	40	6
Miramar Borough ..	30 Nov., 1905	" ..	117	45	1
Mosgiel Borough ..	27 Feb., 1902	Rejected ..	58	87	1
New Brighton Borough ..	27 Feb., 1908	Carried ..	133	76	2
New Plymouth Borough ..	16 Mar., 1905	Rejected ..	167	313	4
Ngaruawahia Town District ..	27 Feb., 1909	Carried ..	16	15	..
Normanby Town District ^(d) ..	15 Nov., 1897	" ..	32	56	3
North-east Valley Borough ..	12 Jan., 1905	" ..	202	172	..
" ^(e) ..	30 Mar., 1908	" ..	354	185	..
North Invercargill Borough ^(f) ..	1 April, 1903	" ..	107	24	2
Ohura County ..	25 Feb., 1911	" ..	100	15	..
Onslow Borough ..	20 Mar., 1901	" ..	140	8	..
Opotiki County ..	15 April, 1909	" ..	45	37	1
Pahiatua Borough ..	19 June, 1897	" ..	136	38	1
Pahiatua County ..	27 June, 1901	" ..	350	31	3
Palmerston North Borough ..	5 Mar., 1897	" ..	402	12	3
Papakura Road District ..	10 Mar., 1900	" ..	30	1	..
Pelorus Road District ..	31 Mar., 1900	" ..	98	41	..
Petone Borough ..	6 Nov., 1901	Rejected ..	100	134	4
" ..	23 Mar., 1905	Carried ..	311	112	..
Piako County ..	22 Aug., 1908	" ..	228	59	..
Picton Borough ..	" ..	Rejected ..	27	73	1
" ..	30 July, 1903	Carried ..	47	38	9
Raglan County ..	23 Nov., 1901	" ..	116	85	2
St. Albans Borough ..	13 Feb., 1902	" ..	350	218	15
St. Kilda Borough ..	28 Nov., 1907	Rejected ..	152	223	1
South Invercargill Borough ..	2 Feb., 1902	Carried ..	106	54	1
Southland County ..	1 Mar., 1902	" ..	919	574	..
Spreydon Road District ..	16 May, 1901	" ..	141	57	4
Stratford County ^(g) ..	29 June, 1901	" ..	399	23	2
Stratford Borough ..	23 July, 1902	" ..	137	64	1
Sumner Borough ..	21 Nov., 1901	" ..	91	19	..
Sydenham Borough ^(h) ..	14 Mar., 1901	" ..	353	193	..
Taihape Borough ..	13 Nov., 1903	Rejected ..	30	68	1
Takaka County ..	2 Sept., 1905	Carried ..	136	40	5
Taratahi-Carterton Road District ⁽ⁱ⁾ ..	26 Aug., 1897	" ..	261	53	..

(a) Road district not now in existence. (b) Illegal, not in accordance with provisions of Rating Act. (c) Now part of Wellington City. (d) Proposal to rescind the adoption of the Act rejected. For proposal, 23; against, 38; informal, 3. (e) For rescission. (f) Proposal to rescind the adoption of the Act rejected. For proposal, 85; against, 124; informal, 2. (g) Including Whangamomona County, since constituted. (h) Now part of Christchurch City. (i) Road district not now in existence.

* New poll taken under Act of 1900.

TABLE SHOWING THE RESULT OF POLLS TAKEN, ETC.—*continued*

	Date of Poll.	Result of Poll.	Votes recorded.		
			For.	Against.	Informal.
Tauranga County	9 Feb., 1901	Carried ..	90	13	2
Temuka Borough	17 Jan., 1903	Rejected ..	118	176	5
Timaru Borough	10 Oct., 1900	" ..	93	246	5
"	18 April, 1905	" ..	372	440	..
Waimarino County	23 Sept., 1903	Carried ..	43	13	..
Waimate Borough	2 Feb., 1901	" ..	235	61	14
Waimate County	1 Nov., 1900	" ..	368	162	..
Waipawa County ^(a)	2 Feb., 1898	" ..	462	28	3
Wairarapa North County ^(b) ..	8 Nov., 1899	Rejected ..	331	68	10
Wairarapa South County ..	23 Oct., 1902	Carried ..	187	8	..
Wairoa Borough	21 Mar., 1910	" ..	79	21	..
Wanganui Borough	17 Dec., 1903	Rejected ..	303	331	2
Wanganui East Borough ..	20 May, 1909	" ..	162	189	..
Weber County	19 Mar., 1909	Carried ..	78	10	1
Wellington City	11 Nov., 1901	" ..	1,261	591	..
West Harbour Borough ..	18 April, 1904	" ..	62	30	2
Westport Borough	19 April, 1904	" ..	280	163	7
Whangarei Borough	27 Sept., 1905	Rejected ..	166	226	2
Winton Borough	29 Nov., 1901	Carried ..	39	31	1
Woodville Borough	21 Mar., 1898	" ..	175	7	1
Woolston Borough	24 June, 1902	" (c) ..	252	190	7

(a) Including Woodville, Waipukurau, and Dannevirke Counties, since constituted.

(b) Poll taken prior to coming into operation of section 2 of the Local Government Voting Reform Act, 1899; less than one-third of ratepayers voted, and proposal consequently rejected. The county has since been subdivided and absorbed in other counties.

(c) New poll taken under Act of 1900. Proposal to rescind rejected; poll taken, 9th March, 1906. For proposal, 213; against, 228.

A county having decided to levy rates on the unimproved value makes it compulsory for all interior Town and Road Boards, excepting certain Town Districts having a population of 500 or over, to adopt the same system of rating. But in counties where the Counties Act is suspended, or where a general rate is not levied, the ratepayers of any Road or Town Board may take a poll on the question. It is also permissible for any Town Board within a county not rating on the unimproved value to adopt that system for the purpose of levying Town Board rates, the decision to do so having been carried by vote of the ratepayers. The date of the polling did not, in some instances, allow of a rate on the unimproved value being struck for the year ended 31st March, 1910.

RATES COLLECTED IN COUNTIES, BOROUGHS, TOWN AND ROAD DISTRICTS, 1909-10.

The amount of general and special rates collected, the capital value of rateable property, and the system of rating in force by the various local authorities during the financial year ended 31st March, 1910, is shown in the following tables. The amount shown as capital value of all rateable properties represents the total value, including the various subdivisions. The population shown for each of the minor divisions is already included in the parent district.

RATES COLLECTED IN COUNTIES, 1909-10.

[System of rating: U. represents rating on the unimproved value, C. on the Capital value, and A. on the annual value.]

Counties and their Subdivisions.	Population, Census 1906.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
		General Rates.	Separate and Special Rates.		
		£	£	£	
Mangonui	2,801	1,012	..	235,635	C.
Whangaroa	801	287	..	75,251	C.
Hokianga	2,514	1,651	63	327,498	C.
Bay of Islands	2,692	1,779	..	404,682	C.
Hobson	4,724	5,896	611	701,203	U.
Whangarei	6,906	2,676	2,132	911,822	C.
Kamo Town District..	315	131	..	..	C.
Hikurangi Road District	..	59	..	..	C.
Kaurihohore Road District	121	67	..	..	C.
Mangakahia Road District	116	9	..	..	C.
Maungakaramea Road District	292	112	..	..	C.
Maunu Road District	804	150	..	..	C.
Marua Road District..	336	156	..	..	C.
Otonga Road District	383	83	..	..	C.
Parua Road District	276	87	..	..	C.
Ruarangi Road District	78	49	..	..	C.
Waikiekie Road District	211	123	..	..	C.
Waipu Road District	598	118	..	..	C.
Waipu North Road District	229	85	..	..	C.
Whareora Road District	107	37	..	..	C.
Waipu River District	..	171	..	..	..
Otamatea	2,921	2,377	403	558,223	C.
Mangawai Road District	278	90	..	..	C.
Mareretu Road District	148	133	..	..	C.
Matakohe Road District	447	163	..	..	C.
Raupo Land Drainage District	..	529	..	..	C.
Rodney	4,185	1,568	1,119	518,583	C.
Albertland North Road District	48	26	..	..	C.
Albertland South Road District	265	97	..	..	C.
Komokoriki Road District	79	47	..	..	C.
Mahurangi East Road District	134	24	..	..	C.
Matakana East Road District..	123	67	..	..	C.
Matakana West Road District	236	136	..	..	C.
Puhoi Road District	481	200	..	..	C.
Warkworth Road District	789	110	..	..	C.
Warkworth Town District	..	156	..	..	C.
Wharehine Road District	89	74	..	..	C.
Waitemata	6,433	3,212	3,739	960,348	C.
Kaukapakapa Road District	484	195	..	..	C.
Pukeatua	577	115	..	..	C.
Eden	18,875	..	..	4,485,121	..
Arch Hill Road District	1,952	518	183	..	A.
Avondale Road District	1,489	1,070	163	..	C.
Eden Terrace Road District	2,338	925	1,040	..	C.
Epsom Road District	1,591	1,784	392	..	C.
Mount Albert Road District	3,583	1,905	2,406	..	C.
Mount Roskill Road District	883	562	547	..	C.

RATES COLLECTED IN COUNTIES—*continued.*

Counties and their Subdivisions.	Population, Census 1906.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
		General Rates.	Separate and Special Rates.		
Eden— <i>continued.</i>		£	£	£	
Mount Wellington Road District	1,084	443	..	..	C.
One Tree Hill Road District ..	1,915	2,251	..	..	C.
Orakei Road District	25	57	..	..	C.
Panmure Township Road District	217	62	..	..	C.
Point Chevalier Road District..	902	189	..	..	C.
Remuera Road District	3,082	4,089	3,600	..	C.
Tamaki West Road District ..	415	614	64	..	C.
Manukau Water-supply District	..	..	3,986	..	C.
Manukau	..	..	..	3,002,111	..
Papakura Town District	359	144	..	..	C.
Pukekohe Town District	390	402	..	..	C.
Awhitu Road District	416	209	..	..	C.
Drury Road District	453	349	..	..	C.
Howick Township Road District	235	95	14	..	C.
Hunua Road District	255	266	100	..	U.
Karaka Road District	314	243	..	..	C.
Mangere Road District	771	614	..	..	C.
Manurewa Road District	298	196	..	..	C.
Maraetai Road District	142	57	..	..	U.
Mauku Road District	458	309	87	..	C.
Maungatawhiri Road District ..	244	107	..	..	C.
Mercer Township Road District	245	59	..	..	C.
Opaheke Road District	367	262	47	..	C.
Otahuhu Road District	1,302	852	..	..	C.
Pakuranga Road District	278	379	..	..	C.
Papakura Road District	396	529	19	..	U.
Paparata Road District	355	179	60	..	C.
Paparoa Road District	195	154	..	..	C.
Papatoitoi Road District	188	330	..	..	C.
Pokeno Road District	362	218	..	..	C.
Pollock Settlement Road District	109	63	..	..	C.
Pukekohe East Road District	1,064	714	..	..	C.
Pukekohe West Road District	845	572	608	..	C.
Tamaki East Road District	579	519	..	..	C.
Turanga Road District	227	137	46	..	C.
Waipipi Road District	1,044	633	318	..	C.
Wairoa Road District	860	640	129	..	C.
Waiuku Road District	592	542	117	..	C.
Aka Aka Land Drainage District	..	220	27	..	C.
Pukekohe Land Drainage District	..	10	14	..	C.
Coromandel	2,841	1,146	137	223,417	C.
Thames	4,286	2,307	..	380,725	C.
Ohinemuri	5,895	1,619	311	606,884	C.
Waikato	4,532	1,386	..	1,290,906	C.
Cambridge Road District	782	732	..	..	C.
Huntly Road District	..	420	83	..	C.
Kirikiri Road District	1,415	2,651	..	..	C.
Tamahere Road District	386	400	..	..	C.
Whangamarino Road District	623	491	130	..	C.

RATES COLLECTED IN COUNTIES—*continued.*

Counties and their Subdivisions.	Population, Census 1906.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
		General Rates.	Separate and Special Rates.		
Waikato— <i>continued.</i>		£	£	£	
Eureka Land Drainage District	..	59	..	..	C.
Fencourt Land Drainage District	..	74	..	..	C.
Hautapu South Land Drainage District	..	16	..	..	C.
Hillside Land Drainage District	..	140	..	..	C.
Woodlands Land Drainage District	..	57	..	..	C.
Waipa	4,849	4,158	1,643	1,579,371	C.
Kihikihi Town District	270	56	37	..	C.
Leamington Town District	325	138	..	..	C.
Ngaruawahia Town District	420	163	82	..	U.
Te Awamutu Town District	530	235	..	..	C.
Newcastle Road District	527	467	..	..	C.
Pukekura Road District	1,092	741	..	..	C.
Rangiaohia Road District	553	504	..	..	C.
Tuhikaramea Road District	127	268	..	..	C.
Mangahoe Land Drainage District	..	68	..	..	C.
Ngaroto Land Drainage District	..	24	24	..	C.
Ohauupo Land Drainage District	..	31	23	..	C.
Frankton Land Drainage District	..	36	..	..	C.
Hungahunga Land Drainage District	..	186	98	..	C.
Te Rapa Land Drainage District	..	12	..	..	C.
Raglan	2,282	3,254	1,739	1,055,184	U.
Raglan Town District	..	70	..	..	C.
Awakino	389	..	..	262,841	C.
Ohura	..	485	..	298,182	C.
Waitomo	1,226	445	..	800,363	C.
Kawa Land Drainage District	..	35	..	..	C.
Kawhia	688	494	6	357,497	U.
Kawhia Town District	155	30	..	..	U.
Matamata	..	4,415	..	660,615	C.
West Taupo	5,158	..	..	190,105	..
East Taupo	509	..	..	391,613	..
Piako	..	4,801	260	776,596	U.
Morrinsville Town District	375	351	..	..	U.
Tauranga	1,999	2,517	854	613,411	U.
Katikati Road District	404	66	..	..	U.
Te Puke Road District	585	195	..	..	U.
Judea Land Drainage District	..	16	..	..	U.
Whakatane	1,015	2,261	76	468,226	C.
Rangitaiki Land Drainage District	..	349	392	..	C.
Opotiki	996	1,401	..	545,179	C.
Waiaapu	858	8,538	201	1,764,347	C.
Waikohu	..	9,790	1,010	1,761,993	C.
Cook	7,173	15,559	3,789	3,532,343	C.
Patutahi Road District	589	..	35	..	C.
Waimata Road District	393	..	79	..	C.
Gisborne Harbour District	..	..	..	..	C.
Clifton	2,837	3,816	678	689,223	C.
New Plymouth Harbour District	..	..	..	..	..

RATES COLLECTED IN COUNTIES—continued.

Counties and their Subdivisions.	Population, Census 1906.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
		General Rates.	Separate and Special Rates.		
		£	£	£	
Taranaki	7,911	5,988	2,264	2,039,719	C.
Barrett Road District ..	585	348	59	..	C.
Egmont Road District ..	678	557	220	..	C.
Hurford Upper Road District ..	59	58	..	..	C.
Mangorei Road District ..	293	179	..	..	C.
Moa Road District ..	2,791	1,783	1,528	..	C.
Oakura Road District ..	365	90	37	..	C.
Okato Road District ..	421	160	75	..	C.
Omata Road District ..	410	90	..	..	C.
Tataraimaka Road District ..	169	72	69	..	C.
Waitara West Road District ..	758	461	128	..	C.
Waiwakaiho Road District ..	359	175	199	..	C.
Werekino Road District ..	42	72	..	..	C.
New Plymouth Harbour District ..	..	..	..	..	..
Hawera	3,185	7,465	1,720	1,902,633	C.
Normanby Town District ..	383	173	..	..	U.
New Plymouth Harbour District ..	..	..	..	..	..
Waimate West	1,571	5,365	1,328	1,188,134	C.
Manaia Town District ..	441	497	117	..	C.
New Plymouth Harbour District ..	..	..	..	..	..
Eltham	3,986	7,895	69	1,485,497	C.
Kaponga Town District ..	278	340	..	..	C.
Eltham Land Drainage District ..	..	..	148	..	C.
Egmont	2,885	4,004	..	1,362,394	C.
Opunake Town District ..	406	178	..	..	C.
Parihaka Road District ..	1,717	1,438	1,028	..	C.
New Plymouth Harbour District ..	..	..	..	..	..
Stratford	5,187	7,628	5,150	2,046,235	U.
New Plymouth Harbour District ..	..	..	..	..	..
Whangamomona	725	1,163	280	422,929	U.
New Plymouth Harbour District ..	..	..	..	..	..
Patea	3,123	4,236	778	2,168,244	C.
Waverley Town District ..	471	345	..	..	C.
Patea West Road District ..	891	..	51	..	C.
Wairoa Road District ..	117	364	..	..	C.
Waitotara-Momohaki Road Dis- trict	382	41	115	..	C.
Waitotara	3,414	5,899	142	1,822,260	C.
Castlecliff Town District ..	..	267	..	..	C.
Waimarino	2,487	1,858	69	892,829	U.
Wanganui	3,833	1,322	89	1,649,778	C.
Kaitoke Road District ..	702	366	..	..	C.
Kaukatea Road District ..	209	290	..	..	C.
Mangamahu Road District ..	..	1,275	..	..	C.
Mangawhero Road District ..	408	857	170	..	C.
Mataongaonga Road District ..	1,027	264	..	..	C.
Purua Road District ..	997	786	..	..	C.
Wangaehu Upper Road District ..	..	1,031	90	..	C.

RATES COLLECTED IN COUNTIES—*continued.*

Counties and their Subdivisions.	Population, Census 1906.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
		General Rates.	Separate and Special Rates.		
		£	£	£	
Rangitikei	7,738	13,437	1,490	4,250,148	C.
Lethbridge Town District	245	103	..	..	A.
Bull's Town District	492	225	97	..	A.
Kiwaita	3,034	4,917	1,965	1,574,709	C.
Kairanga	3,681	5,516	1,594	2,111,674	U.
Mangaone River District	..	75	..	..	U.
Aorangi Land Drainage District	..	201	348	..	C.
Manawatu Land Drainage District	..	2,681	285	..	U.
Makerua Land Drainage District	..	484	188	..	C.
Oroua	3,698	4,529	..	1,958,193	C.
Halcombe Town District	276	106	..	..	A.
Pohangina	1,797	4,421	1,861	809,191	C.
Manawatu	4,007	5,793	1,637	1,705,358	C.
Rongotea Town District	318	201	34	..	C.
Moutoa Land Drainage District	..	152	..	..	C.
Oroua Land Drainage District	..	701	85	..	C.
Horowhenua	4,072	7,680	2,604	2,553,113	C.
Otaki Road District	1,520	807	62	..	C.
Wairoa	1,449	6,151	27	2,431,529	C.
Wairoa Harbour District	..	..	..	..	..
Napier Harbour District	..	..	..	..	..
Hawke's Bay	6,895	17,027	968	5,905,363	C.
Clive River District	..	1,009	..	..	C.
Meeanee River District	..	180	..	..	C.
Pukahu River District	..	90	..	..	C.
Taradale River District	..	235	..	..	C.
Napier Harbour District	..	..	..	..	..
Waipawa	3,245	5,954	1,070	2,155,387	U.
Napier Harbour District	..	..	..	..	..
Dannevirke	4,816	5,282	1,328	1,943,915	U.
Ormondville Town District	413	73	..	..	U.
Waipukurau	450	1,446	106	461,334	U.
Woodville	2,036	2,903	464	1,062,149	U.
Patangata	1,843	7,768	1,370	3,332,478	C.
Otane Town District	268	212	..	..	A.
Oero Road District	293	2,374	..	..	C.
Patangata Road District	259	232	..	..	C.
Porangahau Road District	454	1,304	..	..	C.
Wallingford Road District	207	929	..	..	C.
Waipawa River District	..	178	..	..	C.
Napier Harbour District	..	..	..	..	..
Weber	593	2,553	..	472,713	U.
Pahiatua	3,672	6,139	2,321	1,693,123	U.
Akitio	1,394	5,900	827	722,334	U.
Castlepoint	561	2,747	425	583,538	U.
Castlepoint River District	..	46	..	..	U.
Eketahuna	2,034	1,977	1,367	693,860	U.
Mauriceville	1,089	1,223	344	406,789	C.

RATES COLLECTED IN COUNTIES *continued.*

Counties and their Subdivisions.	Population, Census 1906.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating
		General Rates.	Separate and Special Rates.		
		£	£	£	
Masterton	3,723	7,361	4,476	3,091,147	C.
Wairarapa South	2,734	4,426	1,351	1,480,806	U.
Featherston	2,163	7,385	1,551	2,345,212	C.
Ahikouka River District	..	104	..	..	C.
Kahutara River District	..	40	..	..	C.
Waiohine River District	..	255	..	..	C.
Makara	5,470	2,122	..	743,739	C.
Hutt		7,056	120	1,595,940	C.
Hutt River District	..	733	1,590	..	C.
Sounds	1,098	..	..	551,248	..
Marlborough	7,287	..	..	3,277,384	..
Havelock Town District	267	170	174	..	C.
Awatere Road District	1,266	3,105	..	..	U.
Omaka Road District	1,699	1,533	..	..	C.
Pelorus Road District	1,431	1,049	..	..	U.
Picton Road District	877	616	..	..	C.
Spring Creek Road District	817	598	..	..	C.
Wairau Road District	930	1,491	..	..	C.
Pukaka River District	..	152	..	..	C.
Spring Creek River District	..	439	..	..	C.
Wairau Lower River District	..	1,397	343	..	C.
Kaikoura	1,747	2,472	..	825,053	C.
Kaikoura River District	..	265	..	..	C.
Collingwood	1,211	664	386	197,897	C.
Takaka	1,547	807	497	350,957	U.
Waimea	7,785	8,104	..	1,906,060	C.
Buller	5,458	3,604	1,373	510,431	C.
Inangahua	4,638	5,615	922	265,909	U.
Murchison		532	..	112,112	U.
Grey	5,692	2,500	126	396,427	C.
Westland	4,117	3,071	..	406,470	C.
Amuri	1,406	2,251	201	1,433,731	C.
Waiau Township River District	..	53	..	..	C.
Cheviot	1,605	2,314	50	922,321	U.
Mackenzie Town District	176	88	..	..	U.
Ashley	11,306	..	..	6,281,853	..
Amberley Town District	341	99	..	..	C.
Ashley Road District	651	1,664	..	..	C.
Cust Road District	609	358	..	..	C.
Eyreton Road District	1,449	1,517	..	..	C.
Eyreton West Road District	370	232	..	..	C.
Kowai Road District	1,754	2,142	..	..	C.
Mandeville and Rangiora Road District	2,358	1,954	..	..	C.
Oxford Road District	1,957	1,607	391	..	C.
Waipara Road District	1,817	5,000	1,250	..	C.
Mandeville and Rangiora River District	..	591	..	..	C.

RATES COLLECTED IN COUNTIES—*continued.*

Counties and their Subdivisions.	Population, Census 1906.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
		General Rates.	Separate and Special Rates.		
Ashley— <i>continued.</i>		£	£	£	
Waimakariri - Ashley Water - supply District	..	1,347	1,935	..	C.
Sefton-Ashley Land Drainage District	..	196	261	..	C.
Waipara	..	..	..	..	..
Selwyn	34,378	..	7,352	11,139,747	C.
Southbridge Town District	403	85	..	..	C.
Avon Road District ..	4,191	3,052	278	..	C.
Courtenay Road District	2,315	671	..	..	C.
Ellesmere Road District	3,429	2,023	..	..	C.
Halswell Road District	1,305	1,488	..	..	C.
Heathcote Road District	4,263	3,005	1,023	..	C.
Lake Coleridge Road District	203	773	..	..	C.
Lincoln Road District	1,228	985	187	..	C.
Malvern Road District	679	230	..	..	C.
Malvern East Road District	633	247	..	..	C.
Malvern South Road District	521	216	..	..	C.
Rakaia Road District	856	381	..	..	C.
Riccarton Road District	6,486	4,758	706	..	C.
Spreydon Road District	2,332	1,501	21	..	U.
Springs Road District	1,894	1,121	..	..	C.
Taitapu Road District	354	418	..	..	C.
Templeton Road District	2,561	768	..	..	C.
Waimakariri Upper Road District	725	98	..	..	C.
Waimakariri South River District	..	1,160	..	..	C.
Ellesmere Land Drainage District	..	1,154	..	..	C.
Christchurch Drainage District	..	3,535	..	..	..
Waimairi	..	..	..	..	..
Tawera	..	..	..	..	..
Akaroa	3,155	1,671	24	2,361,941	C.
Akaroa and Wainui Road District	1,260	1,358	..	..	C.
Le Bon's Bay Road District	275	493	56	..	C.
Little River Road District	855	1,843	..	..	C.
O'Kain's Bay Road District	510	664	..	..	C.
Pigeon Bay Road District	255	649	..	..	C.
Wairewa	..	..	..	..	..
Mount Herbert	470	661	..	375,860	C.
Ashburton	9,744	6,389	206	6,645,368	C.
Anama Road District	402	708	..	..	C.
Ashburton Upper Road District	2,019	1,747	..	..	C.
Coldstream Road District	384	307	..	..	C.
Longbeach Road District	1,173	1,046	..	..	C.
Mount Hutt Road District	1,497	1,345	..	..	C.
Mount Somers Road District	808	568	..	..	C.
Rangitata Road District	618	846	..	..	C.
South Rakaia Road District	1,617	1,146	..	..	C.
Wakanui Road District	1,226	916	..	..	C.
Ashburton Forks River District	..	21	..	..	C.
Wakanui River District	..	53	..	..	C.

RATES COLLECTED IN COUNTIES—continued.

Counties and their Subdivisions.	Population, Census 1906.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
		General Rates.	Separate and Special Rates.		
		£	£	£	
Geraldine	5,027	2,497	1,051	2,332,710	C.
Geraldine Road District ..	2,243	2,010	..	..	C.
Mount Peel Road District ..	549	964	..	..	C.
Temuka Road District ..	2,235	1,815	..	..	C.
Orari Upper River District ..	..	..	66	..	C.
Timaru Harbour District ..	..	..	1,814	..	..
Levels	6,134	8,531	252	2,540,899	C.
Timaru Harbour District ..	..	..	1,976	..	..
Mackenzie	1,939	3,486	..	1,000,173	C.
Timaru Harbour District ..	..	..	712	..	..
Waimate	6,510	9,539	676	3,746,043	U.
Wainono Land Drainage Distr. ..	..	63	92	..	U.
Oamaru Harbour District ..	..	..	..	..	..
Timaru Harbour District ..	..	..	1,960	..	..
Waitaki	9,613	9,024	265	3,746,944	C.
Oamaru Harbour District ..	..	..	..	..	..
Waihemo	1,806	1,648	..	564,185	C.
Waikouaiti	4,119	2,175	..	725,354	C.
Peninsula	1,701	..	..	449,973	C.
Otago Heads Road District ..	223	244	..	..	C.
Peninsula Road District ..	556	447	..	..	C.
Portobello Road District ..	794	673	..	..	C.
Tomahawk Road District ..	128	107	..	..	C.
Taieri	6,882	8,125	332	1,598,333	C.
Outram Town District ..	431	61	80	..	C.
Taieri Land Drainage District ..	..	1,596	1,622	..	C.
Bruce	4,675	5,966	1,870	1,274,326	C.
Balmoral Road District ..	..	..	..	..	C.
Inch-Clutha Road District ..	..	..	..	..	C.
Mount Stuart Road District ..	..	118	..	..	C.
Clutha	6,174	6,740	2,118	1,544,820	C.
Clinton Town District ..	418	135	..	..	A.
Tuapeka	6,113	5,018	..	1,233,089	C.
Maniototo	3,004	2,352	..	710,752	C.
Vincent	4,300	2,773	153	493,665	C.
Lake	2,103	1,557	378	274,133	C.
Southland	23,892	29,076	6,179	6,866,227	U.
Benmore-Limehills River District ..	..	12	70	..	U.
Dipton River District ..	..	..	38	..	U.
Dipton Upper River District ..	..	53	..	..	U.
Lochiel River District ..	..	153	..	..	U.
Makarewa-Hedgehope River District ..	..	..	136	..	U.
Winton River District ..	..	1	..	..	U.
Winton Upper River District ..	..	45	22	..	U.
Winton West River District ..	..	67	15	..	U.
Pyramid Block Land Drainage District ..	..	86	..	..	U.

RATES COLLECTED IN COUNTIES—*continued.*

Counties and their Subdivisions.	Population, Census 1906.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
		General Rates.	Separate and Special Rates.		
Southland— <i>continued.</i>		£	£	£	
Waimumu Stream Land Drain- age District	..	77	..	..	U.
Wallace	7,761	10,021	1,268	2,178,639	C.
Fiord	54	..	..	114,014	..
Stewart Island	288	81	11	31,206	C.
Chatham Islands	197	..	..	92,446	..
	..	573,648	122,517	163,409,866	..

The total population of each county is given, including the subdivisions, and the population of subdivisions is shown again separately. For some of the Harbour Boards it was found impossible to allocate the amount of rates collected in each local district, the rating powers of these Boards being exercised independently over an area covering portions of several local rating districts.

Although the capital value of all rateable property is shown, it must be pointed out that some of the North Island counties contain large areas of Native land upon which no rates are collected. Much of this land is rateable, but the difficulty of collecting the amount levied has hitherto been found insuperable. The figures, however, show the potentialities of the local authorities, assuming that this difficulty was removed.

RATES COLLECTED IN BOROUGHs, 1909-10.

[System of rating : U. represents rating on the unimproved value, C. on the capital value, and A. on the annual value.]

Borough.	Estimated Population.	Number of Rate-payers.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
			General Rates.	Separate and Special Rates.		
			£	£	£	
Whangarei	3,000	500	1,772	1,293	298,233	C.
Dargaville	1,050	266	645	..	115,949	U.
Northcote	1,116	268	418	835	145,448	A.
Birkenhead	1,350	322	822	411	252,908	A.
Devonport	6,300	1,103	3,195	7,252	789,091	U.
Auckland	42,748	6,711	25,796	56,944	9,010,834	A.
Grey Lynn	7,000	1,356	2,693	2,153	790,297	U.
Newmarket	2,600	363	2,054	3,381	379,521	A.
Parnell	5,600	674	2,774	4,790	710,292	A.
Mount Eden	8,700	2,409	4,610	4,377	923,919	A.
Onehunga	4,000	685	1,563	1,610	481,247	A.
Thames	3,750	920	2,743	110	230,053	A.
Te Aroha	1,065	233	619	361	68,537	A.
Waihi	5,850	1,410	898	..	363,584	A.
Hamilton	2,600	550	2,405	454	396,147	U.
Cambridge	1,400	319	1,235	928	192,072	A.
Tauranga	1,500	458	617	253	96,092	A.
Gisborne	7,000	1,200	9,802	4,611	1,742,438	A.
Gisborne Harbour District ..	..	..	..	..	..	..
Waitara	1,220	312	850	74	132,660	C.
New Plymouth Harbour District ..	..	..	..	..	..	..
New Plymouth	5,200	800	2,974	4,970	1,095,885	A.
New Plymouth Harbour District ..	..	..	..	..	..	..
Inglewood	1,160	293	852	904	134,747	C.
New Plymouth Harbour District ..	..	..	..	..	..	..
Stratford	2,300	615	1,771	1,827	326,755	U.
New Plymouth Harbour District ..	..	..	..	..	..	..
Hawera	2,300	475	2,619	1,658	423,449	U.
New Plymouth Harbour District ..	..	..	..	..	..	..
Eltham	1,500	347	1,862	1,147	280,280	C.
Patea	900	281	498	176	56,251	A.
Wanganui	9,000	1,850	8,401	3,151	1,218,204	A.
Wanganui East	1,300	315	1,113	..	274,807	A.
Marton	1,500	320	1,698	562	145,334	A.
Taihape	1,600	250	625	330	164,372	A.
Feilding	3,300	1,100	2,964	4,318	767,882	C.
Palmerston North	11,650	1,420	8,372	9,302	1,963,340	U.
Foxton	1,430	271	858	503	150,923	U.
Levin	1,500	465	1,239	..	238,966	C.
Wairoa	..	..	464	..	..	U.

RATES COLLECTED IN BOROUGH—*continued.*

Borough.	Estimated Population.	Number of Rate- payers.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
			General Rates.	Separate and Special Rates.		
			£	£	£	
Hastings	5,000	1,267	8,097	1,723	1,522,997	U.
Napier Harbour District ..	..	..	..	..	..	..
Napier	10,459	1,306	5,969	12,372	1,631,353	..
Napier Harbour District ..	..	..	..	..	..	..
Waipawa	1,050	185	668	738	205,800	U.
Napier Harbour District ..	..	..	..	..	..	..
Dannevirke	3,500	850	2,496	2,287	658,861	U.
Woodville	1,200	442	643	545	98,263	U.
Eketahuna	800	251	853	125	150,895	U.
Pahiatua	1,360	460	847	1,460	205,386	U.
Masterton	5,500	1,648	5,067	3,893	1,079,541	U.
Carterton	1,407	620	727	1,296	249,798	C.
Greytown	1,122	246	805	537	141,804	A.
Lower Hutt	4,000	1,074	7,763	3,812	1,436,365	U.
Petone	7,200	1,026	7,465	2,139	1,204,730	U.
Onslow	1,400	508	1,570	988	438,499	U.
Wellington	69,357	8,670	90,526	59,112	17,617,858	U.
Karori	1,250	550	3,659	3,567	520,666	U.
Eastbourne	750	340	619	260	169,186	U.
Miramar	1,400	646	4,594	3,281	816,168	U.
Picton	995	316	951	590	221,782	U.
Blenheim	3,351	751	2,321	727	617,206	U.
Nelson	8,455	..	5,887	14,895	1,074,280	A.
Richmond	675	155	304	217	95,324	C.
Motueka	1,250	216	600	68	159,772	C.
Westport	4,000	1,200	2,491	2,086	380,418	U.
Greymouth	5,100	..	2,478	2,001	524,333	U.
Brunner	1,100	214	239	349	20,102	A.
Kumara	900	300	134	128	24,279	C.
Hokitika	2,100	625	939	1,381	176,748	U.
Ross	600	350	132	124	17,809	C.
Rangiora	1,750	380	1,058	..	214,129	C.
Kaipoi	1,804	593	692	..	100,185	A.
Christchurch	55,651	10,317	46,719	22,840	9,887,299	U.
Christchurch Drainage Dis- trict	..	..	24,096	..	..	..
Woolston	3,200	769	1,704	1,583	373,206	U.
Christchurch Drainage Dis- trict	..	..	247	..	..	..
Sumner	1,500	500	2,325	1,941	353,075	U.
New Brighton	1,150	733	547	331	185,380	U.
Christchurch Drainage Dis- trict	..	..	158	..	..	..
Lyttelton	4,150	635	2,219	..	799,535	A.
Akaroa	560	128	291	472	69,988	C.
Ashburton	2,850	581	2,657	..	411,128	A.
Temuka	1,680	420	875	549	162,643	C.
Timaru Harbour District ..	..	..	..	124	..	..

RATES COLLECTED IN BOROUGHs—continued.

Borough.	Estimated Population.	Number of Rate- payers.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
			General Rates.	Separate and Special Rates.		
			£	£	£	
Geraldine	1,250	350	309	..	97,931	C.
Timaru Harbour District ..	..	..	..	79	..	..
Timaru	7,600	1,450	6,045	11,943	1,611,762	A.
Timaru Harbour District ..	..	..	..	1,195	..	..
Waimate	1,700	450	977	729	215,358	U.
Timaru Harbour District ..	..	..	..	164	..	..
Oamaru Harbour District ..	..	..	..	..	..	..
Oamaru	6,000	1,250	2,634	2,585	668,902	A.
Oamaru Harbour District ..	..	..	..	..	..	..
Hampden	380	120	78	..	22,232	C.
Palmerston South	800	232	596	132	69,064	C.
Waikouaiti	700	210	240	..	77,464	C.
Port Chalmers	2,140	620	944	2,642	274,935	A.
North-east Valley	5,010	1,460	3,113	649	445,687	A.
Dunedin Drainage and Sewer- age District	..	..	585	..	..	..
Maori Hill	2,500	512	1,342	21	305,522	U.
Dunedin Drainage and Sewer- age District	..	..	103	..	..	..
West Harbour	1,650	520	1,150	648	171,002	U.
Dunedin Drainage and Sewer- age District	..	..	..	..	..	..
Dunedin	38,548	4,959	26,335	41,660	7,193,430	A.
Dunedin Drainage and Sewer- age District	..	..	14,193	..	..	..
Roslyn	6,000	1,280	3,011	3,910	872,387	A.
Dunedin Drainage and Sewer- age District	..	..	643	..	..	..
Mornington	4,650	914	1,642	2,757	484,159	A.
Dunedin Drainage and Sewer- age District	..	..	669	..	..	..
St. Kilda	3,100	850	1,050	1,934	452,671	A.
Dunedin Drainage and Sewer- age District	..	..	493	..	..	..
Green Island	1,500	391	648	..	187,488	A.
Mosgiel	1,530	346	689	956	190,267	A.
Milton	1,400	235	847	..	156,910	A.
Kaitangata	1,682	330	468	147	98,084	A.
Balclutha	1,260	290	503	375	123,925	U.
Lawrence	1,159	255	810	513	102,363	A.
Roxburgh	490	94	173	..	30,013	A.
Tapanui	500	80	191	..	28,700	A.
Naseby	415	127	98	157	27,218	A.
Cromwell	680	145	303	386	39,305	A.
Alexandra	1,000	280	495	472	46,436	A.
Arrowtown	440	113	191	..	15,339	A.
Queenstown	675	242	256	127	53,661	A.
Gore	3,500	792	2,282	1,548	400,940	U.

RATES COLLECTED IN BOROUGH—*continued.*

Borough.	Estimated Population.	Number of Rate- payers.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
			General Rates.	Separate and Special Rates.		
			£	£	£	
Mataura	1,100	251	990	126	138,630	A.
Winton	500	134	197	..	53,119	U.
Invercargill	8,000	1,400	7,348	4,463	1,415,642	U.
North Invercargill ..	987	430	181	219	91,022	U.
East Invercargill ..	1,130	330	212	106	113,627	A.
Avenal	450	126	97	..	71,945	U.
Gladstone	550	220	104	21	102,148	A.
South Invercargill ..	2,400	781	1,399	394	194,565	U.
Campbelltown	1,700	450	1,291	273	221,062	U.
Riverton	1,000	236	387	..	56,310	A.
	488,141	90,388	430,570	348,561	85,298,533	..

Rates collected by the Gisborne, Wairoa, Napier, New Plymouth, and Oamaru Harbour Boards over the various boroughs situate within the Harbour Districts cannot be allocated to the respective boroughs, as the rates are levied and collected over the Harbour Districts as a whole, and no record is kept of the amounts received from each borough.

RATES COLLECTED BY TOWN BOARDS WITH INDEPENDENT POWERS OF ADMINISTRATION, 1909-10.

[System of rating: U. represents rating on the unimproved value, C. on the capital value, and A. on the annual value.]

Town Districts.	Estimated Population.	Number of Rate-payers.	Amount collected during the Year for		Capital Value of all Rateable Properties.	System of Rating.
			General Rates.	Separate and Special Rates.		
			£	£	£	
Hikurangi	600	88	248	127	36,968	C.
Helensville	700	132	290	..	30,088	A.
Ellerslie	1,155	100	621	380	156,763	C.
Huntly	1,000	122	501	..	102,779	C.
Frankton	700	152	689	..	168,681	C.
Rotorua	2,000	..	..	..	..	..
Opotiki	925	246	478	..	129,435	C.
Fitzroy	700	235	773	..	121,740	C.
New Plymouth Harbour District	..	..	..	..	..	..
Gonville	1,000	600	993	..	230,664	C.
Ohakune	600	199	113	..	36,983	U.
Hunterville	650	187	289	227	70,140	C.
Clyde	840	..	253	..	103,997	U.
Wairoa Harbour District	..	..	..	..	..	..
Taradale	940	178	866	..	130,722	C.
Napier Harbour District	..	..	..	..	..	..
Waipukurau	830	196	1,211	..	185,163	U.
Napier Harbour District	..	..	..	..	..	..
Martinborough	790	294	594	681	95,019	C.
Featherston	690	184	499	199	82,080	U.
Upper Hutt	864	361	854	175	204,141	C.
Johnsonville	1,000	407	564	..	223,502	C.
Hampstead	1,500	375	340	..	129,470	C.
Tinwald	500	162	243	..	76,893	C.
Pleasant Point	520	138	202	..	47,598	C.
Timaru Harbour District	..	..	..	..	..	..
Bay	1,300	308	797	..	200,453	C.
Wyndham	527	156	378	..	42,163	A.
Otautau	700	181	425	142	64,748	C.
	20,031	4,401	12,221	1,931	2,670,190	..

The preceding remarks as to the allocation of rates collected by Harbour Boards apply to this table. The next table shows the total amount of rates collected by various Harbour Boards not included in any of the foregoing tables.

RATES COLLECTED IN CERTAIN HARBOUR DISTRICTS DURING THE YEAR 1909-10
NOT INCLUDED IN THE FOREGOING TABLES.

District.	Local Authorities.	Amount of Rates collected.	
		General.	Separate and Special.
		£	£
Gisborne Harbour District ..	Gisborne ..	31	
	Gisborne Borough ..	..	
	Cook County ..	..	
Wairoa Harbour District ..	Wairoa ..	492	
	Wairoa County ..	..	
	Wairoa Borough ..	..	
Napier Harbour District ..	Wairoa ..	21,575	
	Wairoa County ..	..	
	Hawke's Bay County ..	..	
	Waipawa County ..	..	
	Patangata County ..	..	
	Waipawa Borough ..	..	
	Taradale Town District ..	..	
	Waipukurau Town District ..	..	
New Plymouth Harbour District	Otane Town District ..	4,978	
	Taranaki County ..	..	
	Egmont County ..	..	
	Hawera County ..	..	
	Stratford County ..	..	
	Clifton County ..	..	
	Waimate West County ..	..	
	Whangamomona County ..	..	
	Waitara Borough ..	..	
	New Plymouth Borough ..	..	
	Inglewood Borough ..	..	
	Stratford Borough ..	..	
	Hawera Borough ..	..	
	Fitzroy Town District ..	..	
	St. Aubyn ..	..	
Oamaru Harbour District ..	Waitaki County ..	9,539	
	Waimate County ..	..	
	Waimate Borough ..	..	
	Oamaru Borough ..	..	
	Hampden Borough ..	..	
		36,615	

SECTION III.—LICENSES AND LOCAL OPTION.

LICENSES AND LICENSED HOUSES.

DURING the year ended the 31st March, 1910, 1,988 licenses for the sale of intoxicating liquors were granted. Of these, 1,257 were publicans' and accommodation licenses, 6 New Zealand wine, 58 packet, 24 bottle, 163 wholesale, and 480 conditional licenses. The fees paid amounted to £44,900, and formed part of the revenue of the local governing bodies of the districts in which the licenses were issued. Particulars are given in the following table:—

NUMBER OF LICENSES GRANTED DURING THE YEAR 1909-10, AND THE AMOUNT OF FEES PAID TO LOCAL BODIES THEREFOR.

Licenses:	In Counties.	In Boroughs.	In Town Districts.	Total.
Publicans' licenses	446	580	31	1,057
Accommodation licenses ..	197	..	3	200
Total licensed houses ..	643	580	34	1,257
New Zealand wine licenses ..	..	6	..	6
Bottle licenses	..	24	..	24
Packet licenses	7	51	..	58
Wholesale licenses	16	145	2	163
Conditional licenses	396	79	5	480
Total licenses granted ..	1,062	885	41	1,988
Amount of license fees paid to local bodies	£15,042	£28,668	£1,190	£44,900

The average number of persons to each licensed house in counties and boroughs respectively for 1909-10 is next shown:—

	Number of Licensed Houses.*	Population.	Number of Persons to each Licensed House.
Counties	643	427,963	666
Boroughs	580	505,760	874
Town districts†	34	22,334	657
Totals	1,257	957,057	732

In 1908-9 the number of licensed houses in counties was 695, those in boroughs 635, and those in town districts 34, giving a total of 1,364 houses, 107 more than in 1909-10. The average number of persons to a licensed house increased from 687 in 1908-9 to 732 in 1909-10.

* I.e., houses holding publicans' or accommodation licenses.

† Including only such districts as do not now form part of counties.

The annual fees paid for licenses are—

(1.) For a publican's license—	£
(a.) Within the limits of a borough or town district ..	40*
(b.) Outside the aforesaid limits	25
(2.) For a New Zealand wine license	1
(3.) For an accommodation license, a sum to be determined by the Licensing Committee, not exceeding.. .. .	20
(4.) For a packet license—	
(a.) For a vessel exceeding 50 tons register	10
(b.) For a vessel not exceeding 50 tons register	5
(5.) For a wholesale license	20
(6.) For a conditional license, according to duration of license, a sum not exceeding	30

The approximate capital value of the licensed houses in the counties was stated at £695,079 for certain of the boroughs at £1,115,953, and for the town districts at £79,272. There was, besides, an annual value of £121,353 for other licensed houses in the boroughs, which, capitalized at 6 per cent., would represent £2,022,500. The capital value of all licensed houses would therefore be about £3,912,804.

The total number of persons engaged in or connected with the sale or manufacture of wine, spirits, beer, cordials, &c., was returned at the census of 1906 as under :—

	Males.	Females.	Persons.
Hotelkeeper	1,269	220	1,489
Relative assisting	132	883	1,015
Manager, clerk	126	22	148
Hotel servant	1,499	2,619	4,118
Manager, secretary, steward, servant of club-house	155	25	180
Barman, barmaid	307	396	703
Wine, spirits, ale, merchant	47	..	47
Assistant	12	1	13
Relative assisting	2	1	3
Clerk, book-keeper, accountant, traveller, storeman, carter	97	3	100
Cordial, &c., merchant, salesman	5	..	5
Brewer, bottler	204	1	205
Manager, clerk, traveller	94	8	102
Relative assisting, apprentice	4	..	4
Cellarman, assistant, carter, &c.	381	1	382
Maltster and assistants	94	..	94
Wine-maker, bottler	9	..	9
Cordial, &c., maker	257	1	258
Clerk, book-keeper, traveller, assistant	216	10	226
Relative assisting	7	1	8
Totals	4,917	4,192	9,109

* Between the hours of six in the morning and ten at night. For an eleven-o'clock license an additional £5 must be paid.

LOCAL OPTION.

Each electoral district constituted in New Zealand for the election of a member of the House of Representatives is a licensing district, and electors for the House of Representatives are also electors under the licensing laws. The three electorates of the cities of Auckland, Wellington, Christchurch, and Dunedin in each case form one electorate for the purpose of taking a local-option poll.

The local no-license and national prohibition polls are taken on the same day as the general election of members of the House of Representatives.

At every licensing poll there shall be submitted for the determination of the electors of every licensing district (other than a no-license district) the question whether licenses shall continue in that district.

The method of determining the result of the poll in each district by the Returning Officer is as follows:—

(1.) If the number of votes recorded in favour of the continuance of existing licenses is an absolute majority of all the voters whose votes were recorded, the proposal is deemed to be carried, and the licenses continue until the next poll, subject to certain provisions in special cases.

(2.) If the number of votes recorded in favour of the proposal that no license shall be granted is not less than three-fifths of all the voters whose votes were recorded, the proposal is declared to be carried.

(3.) If neither of the proposals respecting licenses is carried by the prescribed majority, the licenses continue as they are until next poll, subject to certain provisions in special cases.

If, as the result of a previous decision, there be no licenses existing in a district, the questions submitted to the electors of such district shall be whether licenses be restored or not restored, but a three-fifths majority in favour of restoration is needed in order to carry that issue.

Should the results of a census prove that the population of a district has increased by 25 per cent. since the previous census, then a proposal as to whether there shall be an increase of licenses granted or not shall be submitted to the electors. Should the proposal for increase receive a three-fifths majority, additional licenses may be granted at the rate of one license for every 700 people of such increase in the district.

NATIONAL PROHIBITION.

At every licensing poll there shall be submitted to the determination of the electors of each licensing district the question whether national prohibition shall come into force throughout New Zealand. If the total number of votes recorded in favour of

national prohibition is not less than three-fifths of the total number of the votes so recorded throughout New Zealand, the determination of the electors shall be deemed to be in favour of national prohibition; and this determination shall, when it comes into force, supersede the determination of the electors of any licensing district. Any such determination in favour of national prohibition shall come into force on the expiration of four years after the date of the general election on which the licensing polls were taken, and shall remain in force until superseded by a determination of the electors in favour of restoration.

NATIONAL RESTORATION.

At the first general election of members of Parliament which is held after the expiration of three years from the day of the coming into force of the determination of the electors in favour of national prohibition, and at every general election thereafter so long as that determination remains in force, a licensing poll shall be taken, and at that poll there shall be submitted to the electors of each licensing district the question whether licenses shall be restored in the Dominion. If the result of the polls is that the total number of votes recorded in favour of the proposal that licenses be restored is not less than three-fifths of all the votes recorded, then that proposal shall be deemed to be carried. Any determination in favour of restoration shall come into force on the expiration of three months.

BOTTLE LICENSES.

No bottle licenses are to be granted or renewed.

EMPLOYMENT OF BARMAIDS.

Under the Licensing Amendment Act of 1910 employment of barmaids is prohibited. No female is permitted to serve in any capacity in the bar of any licensed premises while the bar is open for sale of liquor with the exception of (a) the wife, sister, or daughter of the licensee; (b) the licensee being a woman; (c) any person registered as a barmaid.

RESULT OF POLL.

The result of a poll taken on the 17th November, 1908, as made up from returns received from the officer in charge of the poll in each licensing district, is as follows:—

District.	Number of Electors on Roll.	Votes recorded for			Number of Valid Votes recorded.	Number of Voters who recorded Votes (including informal).		Result of Poll.	
		Con- tinuance.	Reduction.	No-license.		Men.	Women.		Total.
Bay of Islands ..	5,495	2,143	1,500	1,945	4,145	2,734	1,486	Continuance carried.	
Marsden ..	5,967	1,891	2,107	2,539	4,484	2,727	1,815	No proposal carried.	
Kaipara ..	5,801	2,224	2,058	2,387	4,640	3,098	1,653	"	
Waitemata ..	7,728	2,471	2,967	3,369	5,941	3,296	2,739	"	
Auckland West ..									
Auckland Central ..	25,745	8,255	9,669	10,395	18,941	10,304	9,003	Reduction carried.	
Auckland East ..									
Grey Lynn ..									
Eden ..	8,179	2,249	3,908	4,057	6,430	3,366	3,182	See below.	
Parnell ..	8,633	2,662	3,408	3,646	6,509	3,279	3,343	No-license carried.	
Manukau ..	6,935	2,259	3,139	3,404	5,725	3,055	2,772	Reduction carried.	
Franklin ..	5,662	1,868	2,129	2,470	4,364	2,629	1,812	"	
Thames ..	5,509	2,077	2,047	2,377	4,508	2,670	1,919	No proposal carried.	
Ohinemuri ..	6,932	2,035	2,299	3,333	5,408	3,374	2,107	"	
Waikato ..	7,369	2,877	2,478	3,161	6,066	3,567	2,638	No-license carried.	
Tairanga ..	6,457	2,340	2,351	2,860	5,218	3,158	2,136	No proposal carried.	
Bay of Plenty ..	8,776	2,921	1,451	2,269	5,282	3,671	1,701	"	
Gisborne ..	7,713	3,258	2,700	3,749	7,036	4,292	2,831	Continuance carried.	
Hawke's Bay ..	7,844	3,056	1,501	2,486	5,863	3,653	2,329	No proposal carried.	
Napier ..	8,463	3,412	2,561	3,017	6,527	3,683	2,994	Continuance carried.	
Waipawa ..	6,296	2,187	1,946	2,724	4,911	2,867	2,143	"	
Pahiatua ..	5,490	1,795	1,373	2,288	4,164	2,558	1,701	No proposal carried.	
Masterton ..	7,051	2,111	2,522	3,287	5,423	3,114	2,385	"	
Wairarapa ..	6,532	2,282	1,801	2,782	5,101	3,156	2,085	No-license carried.	
Taumarunui ..	7,001	2,542	1,182	1,921	4,563	3,425	1,252	No proposal carried.	
Egmont ..	5,779	1,958	1,703	2,674	4,672	2,397	2,420	Continuance carried.	
Taranaki ..	6,562	2,354	2,127	2,852	5,237	2,728	2,524	No proposal carried.	
Patea ..	6,244	2,328	1,997	2,621	4,970	2,948	2,119	"	
Stratford ..	5,960	2,159	1,509	2,398	4,587	2,779	1,892	"	

District	Number of Electors on Roll.	Votes recorded for			Number of Valid Votes recorded.	Number of Voters who recorded Votes (including informal).			Result of Poll.
		Con- tinuance.	Reduction.	No-license.		Men.	Women.	Total.	
Rangitikei	6,380	2,442	867	1,797	4,251	2,913	1,436	4,349	Continuance carried.
Wanganui	8,497	2,927	2,411	3,552	6,550	3,606	3,075	6,681	No proposal carried.
Oroua	6,290	2,361	1,559	2,891	4,776	2,793	2,067	4,860	"
Palmerston	7,286	2,822	1,725	2,559	5,460	2,930	2,635	5,565	Continuance carried.
Manawatu	6,280	2,208	1,552	2,458	4,697	2,839	1,972	4,811	No proposal carried.
Otaki	5,400	1,811	1,311	1,970	3,956	2,497	1,519	4,016	"
Hutt	7,788	2,390	2,851	3,619	6,086	3,419	2,699	6,118	"
Wellington North	27,239	7,979	8,378	10,072	18,511	10,239	8,642	18,881	"
Wellington Central									
Wellington East									
Wellington South	8,308	2,241	3,466	4,054	6,381	3,387	3,185	6,522	No-license carried.
Wellington Suburbs	8,631	2,448	3,508	4,384	6,879	3,674	3,220	6,894	"
Nelson	7,321	2,772	2,681	2,926	5,894	3,026	2,952	5,978	No proposal carried.
Motueka	5,075	1,778	1,287	1,638	3,500	2,098	1,445	3,543	Continuance carried.
Buller	6,610	2,428	2,149	3,014	5,513	3,522	2,076	5,598	No proposal carried.
Grey	7,185	3,117	1,588	2,416	5,614	3,519	2,227	5,746	Continuance carried.
Westland	6,210	3,206	1,344	1,957	5,257	3,398	2,159	5,557	"
Wairau	6,593	2,682	1,990	2,722	5,442	3,218	2,382	5,550	No proposal carried.
Hurunui	5,714	2,375	1,183	1,764	4,178	2,668	1,595	4,263	Continuance carried.
Kaipoi	6,463	2,400	2,663	3,002	5,410	2,839	2,663	5,502	No proposal carried.
Avon	8,257	2,964	3,022	3,540	6,574	3,273	3,381	6,654	"
Riccarton	7,403	2,884	2,418	2,903	5,890	3,156	2,777	5,933	"
Christchurch North									
Christchurch East	25,758	9,804	8,747	10,141	20,272	10,042	10,517	20,559	"
Christchurch South									
Lyttelton	7,803	3,065	2,773	3,274	6,424	3,394	3,126	6,520	"
Ellesmere	6,862	2,383	1,659	2,216	4,632	2,615	2,113	4,728	Continuance carried.
Selwyn	5,586	2,474	1,503	2,041	4,569	2,948	1,669	4,617	"

[illegible]

From the foregoing table it will be seen that 175,671 votes were recorded in favour of continuing existing licenses—not including six districts, Grey Lynn, Clutha, Ashburton, Oamaru, Invercargill, and Mataura, where the vote (12,469) was for restoration of the licenses cancelled at the polls taken in previous years—162,562 for reduction, and 221,471 for no-license (including 17,990 votes cast for non-restoration in the Grey Lynn, Clutha, Ashburton, Oamaru, Invercargill, and Mataura districts).

In thirty-four of the sixty-eight licensing districts no proposal was carried, in fifteen the majority of the voters was in favour of continuance, in seven reduction, in six no-license was carried, and in six non-restoration was carried. In thirty-eight of the districts—Marsden, Kaipara, Waitemata, Auckland, Parnell, Manukau, Franklin, Thames, Waikato, Tauranga, Gisborne, Waipawa, Pahiatua, Wairarapa, Egmont, Taranaki, Patea, Stratford, Wanganui, Oroua, Manawatu, Hutt, Wellington, Buller, Wairau, Avon, Christchurch, Lyttelton, Geraldine, Waitaki, Kaiapoi, Dunedin, Dunedin South, Chalmers, Timaru, Taieri, Tuapeka, and Awarua—a majority of the votes polled was for no-license, but not in sufficient number to make up the three-fifths required to carry that issue. Of the total number of persons who voted (421,953, including those whose votes were informal), 235,554, or 55·82 per cent., were men, and 186,399, or 44·18 per cent., were women. Compared with the polling in the year 1905, this shows a numerical increase of 13,880, or 6·26 per cent., on the part of the men, and 11,656, or 6·67 per cent., on the part of the women.

A comparison with 1896, 1899, 1902, and 1905 of the votes recorded and the number of persons who went to the poll is shown in the next table:—

Year.	Number of Persons on Rolls.	Votes recorded for			Number of Persons who recorded Votes (including informal).		
		Continuance	Reduction	No License.	Males.	Females.	Totals.
1896 ..	339,230	139,580	94,555	98,312	151,235	108,663	259,898
1899 ..	373,744	142,443	107,751	118,575	160,959	120,863	281,822
1902 ..	415,789	148,449	132,240	151,524	180,294	138,565	318,859
1905 ..	476,473	182,884	151,057	198,768	221,674	174,743	396,417
1908 ..	537,003	188,140	162,562	221,471	235,554	186,399	421,953

The increases in the number of votes recorded for no-license or reduction are prominent features in the above table.

SECTION IV.—MANUFACTORIES AND WORKS.

REMARKS ON SUMMARIZED RESULTS.

In regard to the returns of manufactories and works, it is necessary, as a preliminary, to repeat the statement made at last census as to what has been included.

Whereas up till the time of the census of 1901 the term "factory" was rather held to mean an establishment where manufacture was carried on wholesale, where machinery was employed, and where several hands worked together, in the returns of 1901 and 1906 a "factory" has been interpreted to mean any concern where two or more persons work together at making articles for disposal, wholesale or retail, and without reference to machinery being used or not. Thus these returns include certain industrial workers (and their production) where two or more are found together, with manufactories to supply the wholesale traders or making for export. But the attempt has been made to approximate the census results to those of the Labour Department, according to special direction. The totals for the industries do not include mining, quarrying, and the fisheries, which are dealt with separately.

MANUFACTORIES AND WORKS, 1906 AND 1901.

		April, 1906. No.	March, 1901. No.	Increase 1901-6. No.
Number of establishments*	..	4,186	3,680	506
Hands employed—				
Males	.. ..	44,946	36,292	8,654
Females	.. ..	11,413	10,555	858
Totals	.. ..	56,359	46,847	9,512
		1905.	1900.	1900-5.
Wages paid—		£	£	£
To males	.. ..	3,979,593	2,972,193	1,007,400
To females	.. ..	478,026	330,454	147,572
Totals	.. ..	4,457,619	3,302,647	1,154,972
		H.p.	H.p.	H.p.
Horse-power	.. ..	60,335	39,113	21,222
Total approximate value of—		£	£	£
Land	.. ..	3,264,862	1,980,428	1,284,434
Buildings	.. ..	3,851,902	2,575,679	1,276,223
Machinery and plant	.. ..	5,392,522	3,852,457	1,540,065
Totals	.. ..	12,509,286	8,408,564	4,100,722

* Omitting Government Railway Workshops and Government Printing Office.

Under the heading "Hands employed," the increase was from 46,847 in 1900 to 56,359 in 1905, or at the rate of over 20 per cent. in five years. This increase, it will be observed, is mainly on the male side. The returns show a decrease of females employed in clothing and boot and shoe factories, besides woollen-mills, match-making, and a few others, which brings the net increase in this sex down to 8 per cent.

The wages paid in the factories or industrial works dealt with in the census returns were returned for 1905 at £4,457,619, and for 1900 at £3,302,647, the increase on the total sum being at the rate of 35 per cent.

The average amount of wages paid to male hands in 1905 was £88 10s. 11d., and £81 17s. 11d. in 1900; for females, £41 17s. 8d. against £31 6s. 2d. in 1900. Tested in this way the wages of both would seem to have increased substantially. It must be remembered that these are not adult wages, but those of persons of all ages, male and female distinctly.

The increase for the year 1906 over 1901 in the horse-power stated in the returns was 21,222.

The approximate value of the land used for purposes of the factories was returned as £3,264,862 in 1906, against £1,980,428 in 1901. The value of the lands used for mining is not included in the above figures, and the value of Crown lands has been omitted throughout.

A very large increase will be found in the value of machinery and plant, from £3,852,457 in 1901 to £5,392,522 in 1906, being at the rate of 39·98 per cent. Somewhat of this result is what might be expected, considering the ever increasing use and improvement in machinery that is proceeding with time. The value of the buildings also increased from £2,575,679 to £3,851,902, or 49·55 per cent.

VALUE OF MANUFACTURES OR PRODUCE (OUTPUT).

	1905.	1900.	Increase in 5 Years.
	£	£	£
Value of all manu- factures or produce (including repairs)	23,444,235	17,853,133	5,591,102

This increase is at the rate of 31·31 per cent. for the quinquennium, a very satisfactory rate of progress, taking all the manufactories and works collectively.

The development is analysed in the following statement, which includes nearly the whole increase, and has been worked down to a limit of £20,000 to show the main features. The factories or works in connection with our great primary industries, agricultural, pastoral, timber, and flax, include the greater part of the money.

PRINCIPAL INCREASES, CENSUS 1906.		£
Meat freezing and preserving works, with boiling-down		1,093,654
Butter and cheese factories		1,046,489
Sawmills, sash and door factories		860,077
Grain-mills		375,802
Printing and bookbinding establishments (not Government)		363,542
Flax-mills		354,316
Gasworks		96,353
Ham and bacon curing establishments		94,373
Brick, tile, and pottery works		94,320
Furniture and cabinet making		87,161
Coach building and painting works		78,741
Woodware and turnery factories		72,673
Lime and cement works		62,533
Agricultural-implement factories		61,647
Electric-lighting works		58,796
Sugar-boiling and confectionery works		50,055
Fruit-preserving and jam-making		39,940
Woollen-mills		37,966
Aerated-water factories		37,750
Hosiery-factories		36,323
Chemical-works		30,556
Grass-seed dressing		28,789
Tinware factories		28,563
Biscuit-factories		27,487
Bone-mills and manure-works		26,260
Ship and boat building yards		20,761

The addition of the figures for the total value of manufactures is not absolutely justified to the fullest extent of the amount shown (twenty-three and a half million pounds sterling); but the degree of repetition of value is not so great as to prevent the total given being of great help in judging of development. No doubt the above amount is over the fact, because, for instance, some of the butter made is included in returns for meat-freezing establishments, as well as in the butter-factory returns; timber cut is valued under sawmilling, and some again in the furniture-making line. Also, leather is valued in the tanning returns, and some part of it again in the boot and saddlery items. A certain amount of duplication is unavoidable. This is admitted in the accounts of industrial statistics of the United States of America and elsewhere.

The total increase in value of manufactures for the period 1900-5 (£5,591,102) is not so large as that stated previously for

1895-1900, when the sum was £7,600,000; but the latter represented the rise from a period of depression, which is not the case in respect of the later period.

Where decreases have been found in the returns these may be referred to in a comparative statement which follows.

Particulars relating to individual industries clearly show that quantities have risen, as well as the value of manufactures, so that the development is not merely a question of market prices, but of actual output.

Value of Materials operated upon.

This information was given in case of most industries, but important estimates had to be made to obtain completeness. The sum arrived at for the year 1905 is £13,163,692. The difference between this amount and the total value of all the manufacture and produce (with repairs) may be termed the *net* value of the manufacture in a sense, and duplications on account of the articles of any one kind becoming materials operated upon for another sort would be eliminated. But to arrive at any approximate notion of profit £4,457,619 spent in wages ought further to be deducted, and also interest and depreciation on £12,509,286 invested in land, buildings, machinery, and plant, together with taxes, insurance, and other incidental expenses.

INDUSTRIES IN PROVINCIAL DISTRICTS.

All the various industries for which returns were received in 1906 are given in the statement below, which thus enumerates completely the manufactories and works in operation, specifying the provincial districts in which they are situated:—

INDUSTRIES IN PROVINCIAL DISTRICTS.

Manufactories, Works, &c.	Number of Industries in Provincial Districts.									Total Number of Industries.
	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland.	Canterbury.	Otago.	
Animal food—										
Meat freezing and preserving works	8	4	3	5	1	..	1	6	9	37
Ham and bacon curing establishments	6	7	2	4	..	5	..	11	17	52
Fish curing and preserving works	11	..	..	2	1	..	1	1	5	21
Butter and cheese factories..	57	69	19	51	5	9	3	16	35	264
Condensed-milk factories ..	..	..	..	..	..	..	..	..	2	2
Vegetable food—										
Grain-mills	4	2	1	11	3	6	..	22	28	77
Biscuit-factories	5	..	..	2	..	1	..	1	3	12
Fruit-preserving and jam-making works	8	..	2	1	..	2	..	3	8	24
Sugar-boiling and confectionery works	8	..	2	11	..	1	..	7	7	36
Sugar-refining works ..	1	..	..	..	..	..	..	..	..	1
Baking-powder factories ..	3	..	..	1	..	..	..	3	..	7
Drinks, narcotics, and stimulants—										
Breweries	8	2	5	13	9	2	5	13	15	72
Malthouses	2	..	1	1	1	..	5	8	4	22
Colonial-wine making ..	10	..	4	3	..	2	1	2	..	22
Aerated-water factories ..	23	8	7	22	..	2	14	28	19	123
Coffee and spice works ..	1	..	..	2	..	2	..	3	5	13
Tobacco-manufactories ..	1	..	..	..	..	..	..	1	..	2
Sauce, pickle, and vinegar factories	5	..	..	9	..	2	1	4	6	27
Ice-factories	2	..	..	..	..	..	..	..	..	2
Animal matters (not otherwise classed)—										
Soap and candleworks ..	6	..	2	4	..	1	..	4	2	19
Glue-factory	1	..	..	..	..	..	..	1	..	2
Sausage-skin factories ..	1	..	2	2	..	..	..	5	2	12
Boiling-down works ..	7	2	2	3	..	..	..	2	3	19
Bone-mills and manure-works	3	1	..	2	..	..	..	2	8	16
Working in wood—										
Cooperages	4	4	2	6	..	..	..	5	1	22
Sawmills, sash and door factories	83	34	28	98	15	59	42	18	67	444
Woodware and turnery factories	9	3	1	13	..	..	..	4	9	39
Vegetable produce for fodder—										
Chaff-cutting establishments	8	1	..	3	..	3	..	24	8	47
Grass-seed-dressing establishments	1	2	1	2	..	..	..	9	10	25

[illegible]

INDUSTRIES IN PROVINCIAL DISTRICTS—*continued.*

Manufactories, Works, &c.	Number of Industries in Provincial Districts.									Total Number of Industries.
	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland.	Canterbury.	Otago.	
Machines, tools, and imple- ments—										
Agricultural-implement fac- tories	2	2	3	2	..	..	..	9	11	9
Brush and broom factories ..	5	..	..	2	..	..	..	2	2	11
Cutlery-factory ..	..	..	..	..	..	..	..	..	1	1
Carriages and vehicles—										
Coach building and painting works	38	14	15	41	2	13	3	26	31	183
Cycle-factories ..	5	1	3	19	..	9	1	41	18	97
Harness, saddlery, and leather- ware—										
Saddlery and harness fac- tories	22	9	7	24	1	7	1	14	21	106
Whip-thong factories ..	1	..	..	1	..	..	..	..	..	2
Portmanteau-factories ..	4	..	..	2	..	..	..	1	1	8
Tanning, fellmongering, and wool-scouring establish- ments	13	3	12	16	5	4	..	27	19	99
Ships, boats, and their equip- ment—										
Ship and boat building yards	19	..	..	3	..	..	..	2	6	30
Graving-docks and patent slips	2	..	..	1	..	..	..	2	2	7
Block and pump factories ..	2	..	..	..	..	..	..	..	..	2
Sail, tent, and oilskin factories	3	2	1	7	..	2	1	7	6	29
Furniture—										
Furniture and cabinetmaking	48	13	9	40	2	4	6	27	23	172
Venetian-blind works ..	1	..	..	3	..	..	..	1	4	9
Mattress-factories ..	3	..	..	4	..	..	..	2	2	11
Wool-rug and mat making ..	..	..	..	1	..	..	..	..	2	3
Chemicals and by-products—										
Varnish-manufactories ..	1	..	..	..	..	..	..	..	1	2
Ink-manufactories ..	..	..	..	..	..	..	..	..	2	2
Starch-manufactories ..	..	..	..	..	..	..	..	..	2	2
Chemical-works ..	2	..	..	3	..	..	1	1	10	17
Hematite-paint factories ..	..	..	..	..	..	1	..	..	2	3
Sheep-dip factories ..	..	..	2	1	..	..	..	1	..	4
Match-factories ..	..	..	..	1	..	..	..	..	1	2
Blacking-factories ..	..	..	..	1	..	..	..	2	..	3
Textile fabrics—										
Woollen-mills ..	1	..	1	1	..	..	..	3	4	10
Flock-mills ..	..	..	..	1	..	..	..	..	2	3
Cleaning and dyeing works ..	4	..	..	5	..	..	..	1	3	13
Dress—										
Tailoring establishments ..	60	10	18	69	4	21	2	53	71	308
Dressmaking and millinery establishments	51	14	17	69	..	19	2	89	77	338

INDUSTRIES IN PROVINCIAL DISTRICTS—*continued.*

	Number of Industries in Provincial Districts.									Total Number of Industries.	
Manufactories, Works, &c.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland.	Canterbury.	Otago.		
<i>Dress—continued.</i>											
Shirt-making establishments	5	..	..	6	..	..	..	6	5	22	
Corset and belt manufactories	..	..	..	..	..	..	..	2	..	2	
Clothing and waterproof factories	7	..	..	6	..	..	..	6	4	23	
Boot and shoe factories	..	26	1	..	18	..	1	..	15	11	72
Hat and cap factories	..	6	..	1	3	..	..	..	1	5	16
Hosiery-factories	..	..	..	..	2	..	1	..	3	4	10
<i>Fibrous materials—</i>											
Rope and twine works	..	3	..	1	1	..	..	..	2	3	10
Bag and sack factories	..	..	..	..	..	..	..	..	1	2	3
Flax-mills	..	75	3	4	41	12	13	8	8	76	240
Returns not included in above..	11	1	2	20	4	1	..	18	12	69	
Totals, census 1906 ..	885	247	214	846	68	229	112	696	889	4186	
Totals, census 1901 ..	752	267	160	707	61	198	78	648	809	3680	

The provincial districts, arranged according to the number of industries belonging to each, specified in the last census returns, stand as under:—

	Number of Industries, excluding Mines and Quarries.	
	1906.	
Otago	889	
Auckland	885	
Wellington	846	
Canterbury	696	
Taranaki	247	
Nelson	229	
Hawke's Bay	214	
Westland	112	
Marlborough	68	

DETAILS OF THE PRINCIPAL INDUSTRIES.

The principal industries returned at the census of 1906, and particulars relating thereto, are given in detail in the following table. These industries are arranged in classes according to their nature.

DETAILS OF THE PRINCIPAL INDUSTRIES.

Nature of Industries.	Total Number of Industries.			Number of Hands employed.			Wages paid.			Amount of Power employed (Horse-power).	Value of all Materials used or operated upon during 1905.	Value of all Manufactures or Produce (including Re-fractions for the Year 1905.*	Approximate Value of Land (excluding Crown), Buildings, Machinery, and Plant
	Total		Males.	Total		Females.							
	Males.	Females.		Males.	Females.								
Animal food—													
Meat freezing and pre-serving works†	37	3,157	33	3,190	277,271	£	278,592	H.p.	9,498	£	3,672,002‡	£	1,476,782
Ham and bacon curing establishments†	52	210	14	224	20,729	1,493	22,222	532	186,375	253,937	78,966		
Fish curing and preserv-ing works†	21	103	3	106	6,801	28	6,829	..	13,404	28,109	20,372		
Butter and cheese fac-tories†	264	1,456	28	1,484	130,442	681	131,123	3,759	2,062,215	2,581,639	616,266		
Condensed-milk factories*	2	36	20	58	..	..	..	50	..	..	..	..	..
Vegetable food—													
Grain-mills† ..	77	534	6	540	56,988	347	57,335	3,188	835,477	1,058,686	411,558		
Biscuit-factories† ..	12	379	208	587	23,310	10,571	33,881	389	110,396	225,476	121,366		
Fruit-preserving and jam-making works†	24	174	137	311	7,956	4,247	12,203	155	66,394	98,032	42,317		
Sugar-boiling and con-fectiionary works†	36	304	267	571	21,470	7,940	29,410	84	89,055	138,635	83,752		
Sugar-refining works*	1	228	..	228	..	..	..	675	..	..	..	..	..
Baking-powder factories	7	18	7	25	1,152	166	1,318	..	12,265	16,352	4,785		

* For information as to quantities manufactured or produced, see special tables in Census volume. Value of output, wages, &c., not shown where the number of establishments is so small that particulars might be identified. † For full particulars respecting these industries see special tables in Census volume.

‡ The value of the animals used for freezing was not included in any case in the returns furnished by managers, but an estimated amount has been added on this account. A similar allowance was found necessary for butter. § Some portion of the value of butter manufactured which is stated under "Butter and cheese factories" has been again included in the value of frozen produce.

DETAILS OF THE PRINCIPAL INDUSTRIES—continued.

Nature of Industries.	Total Number of Industries.	Number of Hands employed.			Wages paid.			Amount of Power employed (Horse-power).	Value of all Materials used or operated upon during 1905.	Value of all Manufactures or Produce (including Re-fractions) for the Year 1905.*		Approximate Value of Land (including Crown), Buildings, Machinery, and Plant.
		Males.	Females.	Total.	Males.	Females.	Total.			£	£	£
Drinks, narcotics, and stimulants—												
Breweries†	72	720	11	731	91,973	335	92,308	703	187,799	572,579	334,931	
Malthouses ..	22	90	..	90	8,673	..	8,673	59	+	73,058	74,807	
Colonial-wine making†	22	50	1	51	1,539	52	1,591	4	3,603	9,965	24,792	
Aerated-water factories†	123	563	23	586	48,888	779	49,617	307	71,371	189,561	166,470	
Coffee and spice works ..	13	66	54	120	6,786	1,314	8,100	208	42,322	60,758	36,095	
Tobacco-manufactories*	2	5	8	13	..	..	..	5	..	..	..	
Sauces, pickle, and vinegar factories†	27	115	104	219	8,241	2,922	11,163	55	31,466	56,326	44,982	
Ice-factories*	2	2	..	2	..	..	..	10	..	..	..	
Animal matters (not otherwise classed)—												
Soap and candle works†	19	215	23	238	21,059	794	21,853	277	119,260	178,556	68,566	
Glue factory*	2	13	2	15	..	..	..	36	..	..	..	
Sausage-skin factories ..	12	151	..	151	11,069	..	11,069	4	16,697	37,045	6,807	
Boiling-down works†	19	70	..	70	5,324	..	5,324	127	25,451	37,223	26,825	
Bone-mills and manure-works	16	216	..	216	8,156	..	8,156	196	51,722	66,558	43,755	
Working in wood—												
Cooperages†	22	114	2	116	9,409	94	9,503	158	19,370	38,124	26,736	
Sawmills, sash and door factories†	444	9,098	13	9,111	834,371	556	834,927	13,278	206,644§	2,128,766	1,204,843	

Woodware and turnery factories	39	304	..	304	26,258	..	26,258	540	61,613	110,225	55,815
Vegetable produce for food—											
Chaff-cutting establish- ments	47	194	3	197	10,056	150	10,206	402	114,883	139,060	39,035
Grass-seed-dressing esta- blishments	25	92	..	92	13,768	..	13,768	367	131,415	270,028	54,503
Paper-manufacture—											
Paper-mills* ..	3	87	29	116	..	..	..	730	..	..	..
Paper bag and box fac- tories	8	18	82	100	1,389	2,272	3,661	33	5,274	11,941	19,012
Gasworkst	38	937	17	954	112,939	846	113,785	496	134,474	386,920	1,375,241
Electric-lighting works	13	118	..	118	17,627	..	17,627	6,029	24,406	82,030	323,423
Processes relating to stone, clay, glass, &c.—											
Lime and cement workst	20	280	..	280	34,249	..	34,249	1,175	36,251	107,675	116,746
Brick, tile, and pottery workst	125	1,254	..	1,254	99,246	..	99,246	1,496	..	216,550	273,831
Monumental masonry ..	23	117	1	118	10,657	18	10,675	45	15,580	35,993	22,567
Glassworks ..	4	14	..	14	1,412	..	1,412	4	1,859	5,123	5,340
Electro-plating works*	3	17	..	17	..	..	..	15	..	..	..
Pumice-works*	1	12	..	12	..	..	..	25	..	..	..
Metals, other than gold or silver—											
Tinware-factories	54	469	4	473	36,362	105	36,467	80	68,802	127,150	80,270

* For information as to quantities manufactured or produced, see special tables in Census volume. Value of output, wages, &c. not shown where the number of establishments is so small that particulars might be identified. † For full particulars respecting these industries see special tables in Census volume. ‡ The value of the wood used at the mills was not given in the returns, but an estimate of the total value of materials operated upon has been made on this account.

DETAILS OF THE PRINCIPAL INDUSTRIES—continued.

Nature of Industries.	Total Number of Industries.	Number of Hands employed.			Wages paid.			Amount of Power employed (Horse-power).	Value of all Materials used or operated upon during 1905.	Value of all Manufactures or Products (including Re-pairs) for the Year 1905.*	Approximate Value of Land (excluding Crown), Buildings, Machinery, and Plant.
		Males.	Females.	Total.	Males.	Females.	Total.				
Metals, other than gold or silver— <i>continued</i> .											
Iron and brass foundries, boiler-making, machinists, &c.†	71	1,814	24	1,838	144,340	702	145,042	1,221	178,685	376,527	284,875
Heel and toe plate factories*	3	9	1	10	..	..	..	7	..	..	..
Engineering-works††	61	1,846	22	1,868	166,805	1,191	167,996	1,109	223,365	437,036	249,901
Range-making works ..	11	230	..	230	22,481	..	22,481	74	22,376	64,271	33,461
Spouting and ridging factories	16	158	1	159	16,051	28	16,079	94	51,954	73,756	30,245
Lead-headed-nail works*	2	6	..	6	..	..	..	..	..	..	..
Books and publications—Printing and bookbinding offices‡§	239	3,238	650	3,898	374,872	25,940	400,812	1,520	272,857	1,067,827	920,022
Musical instruments—Musical-instrument factories*	3	11	..	11	..	..	..	7	..	..	..
Ornaments, minor art products, and small wares—Toy-factories* ..	2	29	..	29	..	..	..	5	..	..	..
Picture-frame makers ..	14	33	1	34	2,467	110	2,577	2	8,438	16,296	16,775
Basket and perambulator-factories	26	121	27	148	9,073	793	9,866	12	16,788	34,103	17,190
Cork-cutting* ..	1	4	..	4	..	..	..	..	..	..	..
Lapidaries* ..	3	4	..	4	..	..	..	8	..	..	..

Equipment for sports and games—											
Billiard-table factories ..	4	25	..	25	2,504	..	2,504	17	4,701	10,417	7,263
Designs, medals, type, and dies—	3	5	..	5	..	..	..	3	..	..	..
Rubber-stamp making* ..	1	26	104	130	..	..	..	40	..	..	..
Ammunition—											
Ammunition-works* ..	29	788	5	793	78,801	241	79,042	419	91,043	199,741	95,467
Machines, tools, and implements—											
Agricultural - implement factories	11	99	55	154	7,597	2,083	9,680	62	16,331	36,345	15,657
Brush and broom factories—	1	3	..	3	..	..	..	4	..	..	..
Outlery-factory* ..	183	1,465	..	1,465	116,204	..	116,204	395	122,384	294,818	251,717
Carriages and vehicles—											
Coach building and painting works†	97	486	16	452	30,073	758	30,831	94	37,092	75,991	83,666
Cycle-factories†											
Harness, saddlery, and leatherware—	106	514	30	544	40,872	1,341	42,213	13	72,662	140,813	108,674
Saddlery and harness factories†	2	4	..	4	..	..	..	..	..	..	..
Whip-thong factories* ..	8	45	19	64	2,800	791	3,591	6	6,459	12,064	8,930
Portmanteau-factories ..	99	1,334	2	1,336	102,418	88	102,506	980	1,201,318	1,836,310	182,682
Tanning, fellmongering, and wool-scouring establishments†											
Ships, boats, and their equipment—											
Ship and boat building yards†	30	237	..	237	20,889	..	20,889	88	52,070	66,572	14,722

* For information as to quantities manufactured or produced, see special tables in Census volume. Value of output, wages, &c., not shown where the number of establishments is so small that particulars might be identified.

† For full particulars respecting these industries see special tables in Census volume.

‡ Value of manufactures at Government Railway Workshops not included (£427,341 in 1905), to maintain true comparisons with previous census results.

§ Value of manufactures at Government Printing Office not included (£83,556 in 1905), to maintain true comparisons with previous census results.

DETAILS OF THE PRINCIPAL INDUSTRIES—continued.

Nature of Industries.	Total Number of Industries.	Number of Hands employed			Wages paid			Amount of Power employed (Horse-power).	Value of all Materials used or operated upon during 1905.	Value of all Manufactures or Products (including Re-pairs) for the Year 1905.*	Approximate Value of Land (including Crown), Buildings, Machinery, and Plant.
		Males.	Females.	Total.	Males.	Females.	Total.				
Ships, boats, and their equipment—contd.	7	24	..	24	£ 3,946	£ ..	£ 3,946	H.p. 1,630	£ ..	£ 12,327	£ 447,420
Graving docks and patent slips	2	1	..	1	..	..	..	..	..	..	..
Block and pump factories*	29	97	66	163	8,342	2,863	11,205	..	23,303	45,321	32,692
Sail, tent, and oilskin factories†											
Furniture—											
Furniture and cabinet-making†	172	1,435	93	1,528	130,759	3,825	134,584	706	157,484	328,185	239,375
Venetian-blind works ..	9	33	2	35	1,831	93	1,924	5	4,309	7,180	9,476
Mattress-factories ..	11	52	1	53	3,434	53	3,487	31	8,935	17,892	29,735
Wool, rug, and mat making*	3	10	9	19	..	..	..	6	..	..	..
Chemicals and by-products—											
Varnish manufactories*	2	13	1	14	..	..	..	..	..	..	..
Ink-manufactories*	2	3	1	4	..	..	..	..	..	..	..
Starch-manufactories*	2	20	5	25	..	..	..	40	..	..	..
Chemical-works	17	103	75	178	9,743	2,733	12,476	162	56,308	95,390	86,181
Hamate-paint factories*	3	5	..	5	..	..	..	19	..	..	..
Sheep-dip factories ..	4	7	..	7	426	..	426	6	1,789	4,284	3,402
Match-factories*	2	29	177	206	..	..	..	34	..	..	..
Blackening-factories*	3	3	8	11	..	..	..	31	..	..	..

Textile fabrics—											
Woolen-millst	10	715	834	1,549	68,812	36,224	105,036	1,945	206,847	397,348	307,759
Flock-mills*	3	12	1	13	..	..	..	18	..	..	..
Cleaning and dyeing works	13	30	16	46	2,627	764	3,391	22	1,116	10,332	16,155
Dress—											
Tailoring establishments	308	1,233	1,764	2,997	123,509	91,578	215,087	..	244,191	578,416	372,026
Dressmaking and millinery establishments	338	18	3,021	3,039	562	112,804	113,366	..	181,201	331,268	269,000
Shirt-making establishments	22	25	374	399	2,059	12,896	14,955	12	41,362	75,832	31,680
Corset and belt manufactories*	2	..	11	11	..	..	..	..	..	..	..
Clothing and waterproof factories†	23	375	1,539	1,914	38,045	67,516	105,561	135	154,655	308,943	90,641
Boot and shoe factories†	72	1,518	688	2,206	142,826	28,669	171,495	328	269,664	501,065	153,991
Hat and cap factories ..	16	83	154	237	8,714	7,666	16,380	150	19,817	38,369	47,010
Hosiery-factories† ..	10	30	344	374	3,230	18,730	21,960	46	42,052	67,588	36,697
Fibrous materials—											
Rope and twine works†..	10	195	..	195	13,964	..	13,964	483	68,775	100,753	70,095
Bag and sack factories*	3	7	29	36	..	..	..	12	..	..	..
Flax-millst ..	240	4,076	..	4,076	227,450	..	227,460	3,087	185,894	557,808	355,840
Values for industries of which less than four of any one sort were found in the returns	..	..	..	..	61,541	15,169	76,710	..	653,646	843,002	215,749
Returns not included in above	69	308	133	441	23,996	5,346	29,342	53	50,976	146,643	91,549
Totals census 1906..	4,186	44,946	11,413	56,359	3,979,593	478,026	4,457,619	60,335	13,163,692	23,444,235½	12,509,286
Totals, census 1901..	3,680	36,292	10,555	46,847	2,972,193	330,454	3,302,647	39,113	7,749,770	17,853,133	8,408,564

* For information as to quantities manufactured or produced, see special tables in Census volume. Value of output, wages, &c., not shown where the number of establishments is so small that particulars respecting these industries see special tables in Census volume.

† For full particulars respecting these industries see special tables in Census volume. ‡ Value of manufactures at Government Railway Workshops not included (£427,341 in 1905), to maintain true comparisons with previous census results.

§ Value of manufactures at Government Printing Office not included (£83,566 in 1905), to maintain true comparisons with previous census results.

NOTE.—Two or more distinct industries were carried on at some establishments. In such cases particulars of power, hands, and plant employed, and wages paid, unless stated separately for each branch of industry, have been treated as belonging to the most important work.

The succeeding statement shows the most important industries in operation in 1906, ranged in order of the values of their output for 1905, and compared with the results obtained for the years 1900, 1895, 1890, and 1885:—

	Total Value of all Manufactures or Produce, including Repairs.				
	1905. £	1900. £	1895. £	1890. £	1885. £
Meat freezing and preserving and boiling-down works ..	4,928,545	3,834,891	1,652,275	1,464,659	543,878
Butter and cheese factories ..	2,551,639	1,535,150	501,274	150,957	43,094
Sawmills, sash and door factories ..	2,128,766	1,268,689	898,807	832,959	1,177,713
Tanning, fellmongering, and wool-scouring establishments ..	1,836,310	1,888,107	1,237,252	1,026,349	634,915
Printing establishments (not including Government Printing Office)	1,067,827	704,285	389,124	354,559	273,886
Grain-mills ..	1,058,686	682,884	874,656	991,812	754,830
Iron and brass foundries, boiler-making, machinists, &c. (not including Government Railway Workshops) ..	877,884	924,171	302,815	403,635	368,919
Clothing and boot and shoe factories ..	810,008	871,658	638,512	570,315	514,506
Breweries and malthouses ..	645,637	659,298	418,830	380,849	421,197
Tailoring establishments ..	578,416	301,356	..	..	..
Flax-mills ..	557,808	203,492	32,546	234,266	20,059
Woollen-mills ..	397,348	359,382	302,423	279,175	194,311
Gasworks ..	386,920	290,567	199,025	178,947	194,653
Dressmaking and millinery ..	331,268	312,436	..	..	..
Furniture and cabinetmaking ..	328,185	241,024	85,327	131,314	162,375
Coach building and painting ..	294,818	216,077	148,969	139,660	128,346
Grass-seed dressing ..	270,028	241,239	..	..	..
Ham and bacon curing ..	253,937	159,564	86,022	83,435	58,799
Biscuit-factories ..	225,476	197,989	118,979	127,147	47,784
Brick, tile, and pottery works ..	216,550	122,280	66,140	56,830	91,797
Agricultural-implement factories ..	199,741	138,094	102,054	144,472	111,823
Aerated-water factories ..	189,561	151,811	98,609	91,691	94,093
Soap and candle works ..	178,556	158,649	152,298	155,714	130,745
Saddlery and harness factories ..	140,813	147,626	63,735	37,347	..
Chaff-cutting ..	139,060	169,313	78,497	63,236	54,440
Sugar-boiling and confectionery ..	138,635	88,580	33,235	17,248	17,180
Tinware-factories ..	127,150	98,587	63,723	14,297	8,500
Woodware and turnery ..	110,225	37,552	18,276	9,050	..
Lime and cement works ..	107,675	45,142	15,881	19,416	16,933

Rope and twine works ..	100,753	87,863	52,400	76,711	56,413
Fruit-preserving and jam-making ..	98,032	58,092	36,108	27,255	32,292
Chemical-works ..	95,390	64,834	75,320	41,568	34,283
Electric lighting ..	82,030	23,234	..	..	..
Cycle-factories ..	75,991	65,047	18,817	5,655	1,301
Shirt-making ..	75,832	75,879	..	..	..
Spouting and ridging factories ..	73,756	112,691	23,762	33,140	25,478
Hosiery-factories ..	67,588	31,265	9,357	5,650	6,200
Ship and boat building ..	66,572	45,811	25,233	35,847	56,132
Bone-mills and manure-works ..	66,558	40,298	12,246	4,628	8,337
Coffee and spice works ..	60,758	45,628	74,339	64,024	98,234
Sauce, pickle, and vinegar factories ..	56,326	38,082	13,417	6,407	3,145
Sail, tent, and oilskin factories ..	45,321	44,854	30,166	31,083	25,574
Hat and cap factories ..	38,369	25,641	10,902	21,628	13,695
Cooperages ..	38,124	37,521	19,233	11,540	11,862
Sausage-skin factories ..	37,045	30,674	13,472	10,582	..
Brush and broom factories ..	36,345	21,131	23,363	13,340	7,786
Monumental masonry ..	35,993	22,313	..	..	..
Basket and perambulator factories ..	34,103	17,942	11,920	7,381	4,375
Fish curing and preserving works ..	28,109	25,173	10,292	19,537	12,182
Mattress-factories ..	17,892	16,296	1,850	..	..
Baking-powder factories ..	16,352	18,163	10,153	5,637	4,120
Picture-frame making ..	16,296	5,771	..	..	..
Graving-docks and patent slips ..	12,327	7,264	5,422	9,000	..
Portmanteau-factories ..	12,064	5,483	..	2,889	..
Paper bag and box factories ..	11,941	14,217	7,698	4,497	..
Billiard-table factories ..	10,417	..	..	..	..
Cleaning and dyeing works ..	10,332	7,855	7,530	13,667	4,510
Colonial-wine making ..	9,965	10,330	8,963	9,456	3,636
Other industries in respect of which the value of the manufactures was less than £8,000, and sundry ..	1,006,232	803,938	468,113	359,376	237,108

The order of the principal industries, ranged according to the number of hands employed, is as follows:—

	1906.	1901.	1896.	1891.
Sawmills, sash and door factories	9,111	6,812	4,059	3,266
Clothing and boot and shoe factories ..	4,120	5,322	4,500	3,233
Flax-mills	4,076	1,698	647	3,204
Iron and brass foundries, machinists, &c. (excluding Government Railway Workshops)	3,936	3,590	1,642	1,787
Printing and bookbinding establishments (ex- cluding Government Printing Office) ..	3,898	3,134	2,351	2,569
Meat freezing, preserving, and boiling-down works	3,260	2,282	2,037	1,568
Dressmaking and millinery establishments ..	3,039	2,888	..	..
Tailoring establishments	2,997	1,621	..	..
Woollen-mills	1,549	1,693	1,416	1,175
Furniture and cabinetmaking factories ..	1,528	1,310	496	585
Butter and cheese factories	1,484	1,138	576	269
Coach building and painting works ..	1,465	1,185	807	678
Tanning, fellmongering, and wool-scouring establishments	1,336	1,963	1,629	1,199
Brick, tile, and pottery works	1,254	838	455	494
Gasworks	954	572	295	249
Breweries and malthouses	821	827	560	563
Agricultural-implement factories	793	586	581	528
Biscuit-factories	587	667	425	331
Aerated-water factories	586	452	347	261
Sugar-boiling and confectionery works ..	571	305	69	53
Saddlery and harness factories	544	652	266	184
Grain-mills	540	515	419	499
Tinware-factories	473	337	289	93
Cycle-factories	452	395	125	31
Shirt-making establishments	399	531	..	..
Hosiery-factories	374	282	193	51
Fruit-preserving and jam-making works ..	311	172	193	117
Woodware and turnery factories	304	156	81	51
Lime and cement works	280	184	79	98
Soap and candle works	238	232	190	209
Ship and boat building yards	237	211	108	145
Hat and cap factories	237	117	72	112
Sugar-refining works	228	256	160	110
Ham and bacon curing establishments ..	224	196	123	84
Sauce and pickle factories	219	151	74	44
Bone-mills and manure-works	216	47	46	25
Match-factories	206	183	121	..
Chaff-cutting works	197	266	212	205
Rope and twine works	195	192	150	222
Chemical-works	178	95	114	55
Sail, tent, and oilskin factories	163	231	143	124
Spouting and ridging factories	159	261	90	100

	Number of Hands.			
	1906.	1901.	1896.	1891.
Brush and broom factories.. ..	154	128	92	81
Sausage-skin factories	151	98	56	73
Basket and perambulator factories	148	118	76	63
Ammunition-works	130	105	90	80
Coffee and spice works	120	78	119	81
Electric-lighting works	118	52	..	..
Monumental masonry	118	81	..	..
Paper-mills	116	98	84	48
Cooperages	116	138	76	53
Fish curing and preserving works	106	137	75	140
Paper bag and box factories	100	81	86	35
Grass-seed-dressing establishments	92	60	7	..
Portmanteau-factories	64	22	13	14
Condensed-milk factories	58	33	10	2
Mattress-factories	53	55	15	..
Colonial-wine making	51	59	53	24
Cleaning and dyeing works	46	51	58	48
Bag and sack factories	36	6	22	14
Venetian-blind works	35	51	45	29
Picture-frame makers	34	22	..	..
Starch and soda factories	25	32	27	13
Baking-powder factories	25	29	19	27
Billiard-table factories	25	7	2	..
Graving-docks and patent slips	24	32	29	64
Industries employing under 20 hands	675	679	255	173

SECTION V.—REPRESENTATION, THE ELECTORAL LAW, AND THE GENERAL ELECTION OF 1908.

REPRESENTATION.

For purposes of the representation of the people in the House of Representatives New Zealand is at present divided into seventy-six districts, with one member for each. The districts are adjusted every five years upon a population basis, each having, as nearly as possible, the same number of inhabitants.

In computing the population for electoral purposes an addition of 28 per cent. is made to the country population—*i.e.*, all persons living outside towns of 2,000 inhabitants and over. The total population (other than Maoris), with the addition aforesaid having been ascertained, is then divided by the number of members and the quotient thus obtained forms the quota. Inasmuch as it would be difficult to divide the country into a given number of districts all having exactly the precise quota of population, the law permits the Commissioners to make an allowance of 550 persons by way of addition to or deduction from the population of rural districts, and of 100 in case of city electorates, and a proportionate number for districts where the population is partly city and partly rural, so that more consideration can be given to community of interest, facilities of communication, and topographical features in constructing the districts.

The boundaries of the proposed districts are then gazetted, and objections to such proposals may be lodged with the Commissioners, who consider and decide any objections before coming to a final determination.

The census is the only means of ascertaining correctly the distribution of the people, and for this reason is essential to the work of dividing the Dominion anew into electorates of even population. The internal movement of the people cannot be ascertained correctly except by a census, though, when a country is insular, the natural increase (excess of births over deaths) added to the excess of arrivals over departures gives a fairly correct estimate of increase of population for the whole area.

An instance of the effect of the census in adjusting the representation of the people for Parliament is afforded by the figures relating to the North and South Islands for successive census years,—

At the census of			North Island. 30 members	South Island. 40 members.
"	1891	..	31	39
"	1896	..	31	39
"	1901	..	34	36
"	1906	..	38	38
"	1911	..	41	35

The districts have again to be defined on the basis of the population as shown by the census taken in April, 1911.

These districts are, as before stated, for purposes of European representation. But the Dominion is again divided into four districts for purposes of Maori representation, under the electoral law, each district having one Native member elected by the Maoris; making the House of Representatives consist of 80 members altogether—76 Europeans and 4 Maoris.

THE ELECTORAL LAWS.

General Provisions.

Every male, registered as an elector, is qualified to be a member of Parliament for any electoral district, provided he is not an undischarged bankrupt, a Civil servant, or has not entered into, or is directly interested in, any contract with the Government exceeding the value of £50. Except in case of a dissolution in the meantime a general election of members of the House of Representatives is held every three years.

All male or female adults who are British subjects either by birth or naturalization in New Zealand, and who are not debarred by law, may be registered as electors, provided they have resided twelve months in New Zealand, and three months immediately preceding registration in the district wherein they desire to be enrolled, and no person may be registered for more than one district. The electoral rolls are compiled annually up to a fixed date, and if necessary, supplementary rolls, containing additions to and amendments of the general rolls, are prepared immediately before an election. Rights or permits to vote may be issued to seamen or other persons who may be absent, at the time of an election, from the district wherein they are enrolled, to enable them to record their votes for such district. A voting permit shall not remain in force for any period exceeding twelve months. The Minister may from time to time direct that an electoral census be taken of every or any electoral district for the purpose of enrolling all persons qualified to be enrolled and who are not already enrolled.

Every master or mistress of any licensed publichouse, lodging-house, or private dwellinghouse shall, on enrolment officer's application, give all information as to names, occupations, and qualifications for enrolment of all persons residing in that house.

Persons failing to give faithful information on request are liable to a fine of £5.

Elections are conducted by Returning Officers, one for each district, on the authority of a writ issued by direction of the Governor, and which specifies the day upon which the election shall be held. The Returning Officer appoints a deputy, and each candidate may appoint a scrutineer for every polling-place within his district. Every precaution is taken to guard against undue influence being used or interference with electors on the polling-day. Within seventy days after the declaration of the poll each candidate must render a true account to the Returning Officer of all expenses

incurred in connection with his candidature, and such expenses must not exceed a total of £200. Petitions against the return of candidates are tried before two Judges of the Supreme Court, and their decision is final. Persons found guilty of corrupt or illegal practises are liable to heavy penalties.

For Maori representation every adult Maori is entitled to vote in the district where he or she resides, without registration, and every male elector is qualified to become a member of Parliament for any Maori Electoral District. Writs are issued fixing the date of the elections; Returning Officers, Deputy Returning Officers, and polling-places are appointed as in the case of European elections. Candidates are nominated in public meeting, and a show of hands is taken separately in favour of each candidate, when the person who receives the greatest show of hands is declared to be elected, unless any candidate demands that a poll be taken. Voting-papers are issued by the Returning Officer, on application, at any time from the date of nomination to the closing of the poll, and each elector desiring to vote must, on the day appointed, present his voting-paper, at the same time stating the name of the candidate for whom he wishes to vote, and his own name. These particulars are written upon the paper, and signed by the Returning Officer or his deputy and a witness. Candidates may appoint scrutineers. Precautions are taken to preserve order and sobriety on the election-day, and a penalty of £5 may be inflicted upon any person found guilty of supplying intoxicating liquor to a Maori on that day.

Second Ballot.

In October of the year 1908 the Second Ballot Act was passed, under which the principle of an absolute majority of votes is adopted, and applied to the election of any candidate for a seat in the House of Representatives.

By this system a candidate must secure more than half of the valid votes recorded. If no candidate receives an absolute majority of votes as the result of the first ballot, the second ballot becomes necessary, and is taken between the two candidates who have received the highest number of votes, all others being excluded. The date for taking the second ballot is fixed as the seventh day after the close of the poll on the first ballot, excepting in ten electorates, where the difficulties of communication necessitate an interval of fourteen days being allowed.

The candidate who at the second ballot receives the higher number of votes is declared to be elected. There are provisions for deciding procedure when an equal number of votes is polled by both candidates, the Returning Officer giving a casting-vote; also as to recounts and election petitions.

The Act does not at present apply to the election of representatives of the Maori race, but the Governor is empowered to at any time, by Order in Council, bring the second ballot into operation as regards Maoris.

At the general election held on 17th November, 1908, in twenty-three electoral districts the candidate who polled the greatest number of votes failed to secure an absolute majority of all the votes polled. As the result of a second ballot fifteen of these candidates were elected and eight defeated. The total number of votes recorded in these districts at the first ballot, including 3,015 informal, was 133,752, or 78 per cent. of the number on the rolls, and at the second ballot 126,404 valid votes and 403 informal were recorded, being 74 per cent. of the total roll number. Thus there was a decrease of 6,945 votes, and if to these be added 6,601 votes of electors who voted upon the second occasion only it is found that 13,546 persons who recorded their votes at the first failed to do so at the second ballot.

THE GENERAL ELECTION OF 1908.

For European Representatives.

[Polling-day, 17th November, 1908; number of polling-places, 2,421.]

Dealing with the population of both sexes, it is found that the total number of persons on the rolls was 537,003. The number of persons who voted, or who went to the poll, was 428,648, or 79·82 per cent. of the number on the rolls, a smaller proportion than obtained in 1905—viz., 83·25 per cent.

Date of General Election	Estimated Total Adult Persons.	Number on Rolls.	Proportion per Cent. of Adult Persons registered as Electors.	Number of Persons who voted.	Proportion per Cent. of Persons on Rolls who voted.
1893	319,010	302,997	94·98	220,082	75·25*
1896	356,658	339,230	95·11	258,254	76·13
1899	386,146	373,744	96·79	279,330	77·59*
1902	429,385	415,789	96·83	318,859†	76·69
1905	500,108	476,473	95·28	396,657‡	83·25
1908	538,950	537,003	99·64	428,648§	79·82

* Excluding figures for three electorates in which there was no contest. † Including 4,974 informal votes. ‡ Including 5,468 informal vote. § Including 4,596 informal votes.

Dealing with men only, the number on the rolls was 294,073. The males who voted in 1908 were 238,534, or 81·11 per cent. of those on the rolls, against 84·07 per cent. in 1905.

Date of General Election.	Estimated Total Adult Males.	Number of Men on Rolls.	Proportion per Cent. of Adult Males registered as Electors	Number who voted.	Proportion per Cent. of Males on Rolls who voted.
1893	179,539	193,536	†	129,792	69·61*
1896	197,002	196,925	99·96	149,471	75·90
1899	214,773	210,529	98·02	159,780	79·06*
1902	233,602	229,845	98·39	180,294†	78·44
1905	273,175	263,597	96·49	221,611‡	84·07
1908	295,446	294,073	99·54	238,534§	81·11

* Excluding figures for three electorates in which there was no contest. † The number on the rolls was in excess of the estimated adult male population at the date of the election. ‡ Including informal.

The number of women who voted, 190,114, is 78·26 per cent. of the females on the rolls, while in 1905 there were 175,046 who voted, giving the higher proportion of 82·23 per cent.; so that there is no evidence of a greater willingness on the part of the females to go to the poll.

Date of General Election.	Estimated Total Adult Females.	Number of Women on Rolls.	Proportion per Cent. of Adult Females registered as Electors.	Number who voted.	Proportion per Cent. of Females on Rolls who voted.
1893	139,471	109,461	78·48	90,290	85·18*
1896	159,656	142,305	89·13	108,783	76·44
1899	171,373	163,215	95·24	119,550	75·70*
1902	195,783	185,944	94·97	138,565†	74·52
1905	226,933	212,876	93·80	175,046†	82·23
1908	243,504	242,930	99·76	190,114†	78·26

* Excluding figures for three electorates in which there was no contest. † Including informal.

RESULT OF GENERAL ELECTION, 1908.

Electoral District and Name of Candidate.	Number of Votes recorded.			
	First Ballot.		Second Ballot.	
	For each Candidate.	Total.	For each Candidate.	Total.
Bay of Islands,—				
Reed, V. H.	2,241	4,221		
Johnson, J. C.	1,980			
Marsden,—				
Mander, F.	2,381	4,474		
Harrison, J.	1,677			
Soule, M.	416			
Kaipara,—				
Stallworthy, J.	2,510	4,737		
Harding, A. E.	2,227			
Waitemata,—				
Phillipps, L. R.	2,947	..	3,426	5,952
Napier, W. J.	2,038		2,526	
Wilding, H. W.	674	5,932		
Wake, T.	273			
Auckland West,—				
Poole, C. H.	4,126	6,797		
Thompson, R.	2,671			
Auckland Central,—				
Glover, A. E.	4,050	6,181		
Kidd, A.	1,510			
Bosser, A.	621			

Number of Votes recorded.

Electoral District and Name of Candidate.	First Ballot.		Second Ballot.	
	For each Candidate.	Total.	For each Candidate.	Total.
Auckland East,—				
Baume, F. E.	3,358			
Richardson, W.	2,262			
Harle, J. N.	374			
		5,994		
Grey Lynn,—				
Fowlds, G.	4,035			
Nicholson, O.	3,146			
Browne, J. U.	57			
		7,238		
Eden,—				
Bollard, J.	4,315			
Shackelford, J. W.	2,151			
		6,466		
Parnell,—				
Lawry, F.	3,373			
Moss, E. G. B.	3,154			
		6,527		
Manukau,—				
Lang, F. W.	2,995			
Creamer, A. A.	1,626			
Morton, J. B.	1,139			
		5,760		
Franklin,—				
Massey, W. F.	2,781			
McLarin, J. W.	1,594			
		4,375		
Thames,—				
McGowan, J.	3,005			
Deeble, E.	905			
Mason, O.	297			
Isitt, F. W.	124			
		4,331		
Ohinemuri,—				
Poland, H.	2,078		2,884	
Haselden, F. H.	1,252		2,192	
Way, R. F.	725			
Foster, J.	268			
Armstrong, H. T.	256			
		4,579		5,076
Waikato,—				
Greenslade, H. J.	3,290			
Bell, A.	2,819			
		6,109		
Tauranga,—				
Herries, W. H.	3,269			
Young, J. A.	1,966			
		5,235		
Bay of Plenty,—				
Macdonald, W. D. S.	2,413		2,650	
Gow, J. B.	1,968		2,204	
Lundon, D.	901			
		5,282		4,854

Electoral District and Name of Candidate.	Number of Votes recorded.			
	First Ballot.		Second Ballot.	
	For each Candidate.	Total.	For each Candidate.	Total.
Gisborne,—				
Carroll, J.	3,485	..	3,218	
Darton, G. E.	2,062	..	2,484	
Clayton, W. L.	1,454			
		7,001		5,702
Hawke's Bay,—				
Russell, Sir W. R.	1,665	..	2,495	
Dillon, A.	1,460	..	3,199	
Simson, H. I.	1,076			
Jull, A. E.	745			
Clapham, G. S.	656			
Thompson, T. J.	153			
		5,755		5,694
Napier,—				
Brown, J. V.	3,803			
Fraser, A. L. D.	2,768			
		6,571		
Waipawa,—				
Hall, C.	2,507			
Hunter, G.	2,457			
		4,964		
Pahiatua,—				
Ross, R. B.	1,860	..	2,028	
Cooper, J. C.	1,240	..	1,764	
Hawkins, W. H.	1,114			
		4,214		3,792
Masterton,—				
Hogg, A. W.	3,333			
Hunter, J.	2,085			
		5,418		
Wairarapa,—				
Buchanan, W. C.	2,721			
Hornsby, J. T. M.	2,585			
		5,306		
Taumarunui,—				
Jennings, W. T.	3,256			
Bowater, W. T.	1,406			
		4,662		
Egmont,—				
Dive, B.	1,618	..	2,408	
Wake, G. P.	1,385	..	2,159	
Wilkinson, C. A.	1,013			
Astbury, D. L. A.	679			
		4,695		4,567
Taranaki,—				
Okey, H. J. H.	2,849			
Malone, W. G.	1,554			
Bellringer, C. E.	856			
		5,259		
Patea,—				
Pearce, G. V.	2,640			
Major, C. E.	2,388			
		5,028		

Electoral District and Name of Candidate.	Number of Votes recorded.			
	First Ballot.		Second Ballot.	
	For each Candidate.	Total.	For each Candidate.	Total.
Stratford,—				
Hine, J. B.	2,386			
Symes, W.	1,662			
King, N. J.	583	4,631		
Rangitikei,—				
Remington, A. E.	2,242			
Smith, R. W.	2,084	4,326		
Wanganui,—				
Hogan, J. T.	3,041	..	3,602	
Hutchison, G.	1,882	..	2,860	
Mackay, C. E.	1,710	6,633		6,462
Oroua,—				
Guthrie, D. H.	2,417			
Pleasants, O. G.	1,476			
Hornblow, R. E.	926	4,819		
Palmerston,—				
Buick, D.	2,701	..	2,803	
Wood, W. T.	2,656	..	2,722	
Milverton, W.	124	5,481		5,525
Manawatu,—				
Newman, E.	2,231	..	2,636	
Stevens, J.	1,885	..	2,051	
Frankland, F. W.	347			
Gardner, O.	257	4,720		4,687
Otaki,—				
Field, W. H.	2,024			
Brown, B. P.	1,931	3,955		
Hutt,—				
Wilford, T. M.	3,764			
Shortt, R. W.	2,226	5,990		
Wellington North,—				
Herdman, A. L.	2,824	..	3,716	
Bolton, F. G.	1,858	..	2,890	
Izard, C. H.	1,833			
Bodley, H.	131	6,646		6,606
Wellington Central,—				
Fisher, F. M. B.	2,668			
Hilop, T. W.	2,525	5,193		
Wellington East,—				
Atkinson, A. R.	2,412	..	3,022	
McLaren, D.	1,746	..	3,450	
McLean, W.	1,305			
Winder, G.	1,076	6,539		6,472

Number of Votes recorded.				
Electoral District and Name of Candidate.	First Ballot.		Second Ballot.	
	For each Candidate.	Total.	For each Candidate.	Total.
Wellington South,—				
Barber, W. H. P.	2,617	..	2,896	
Wright, R. A.	2,362	..	3,454	
Chapman, C. H.	687			
Forbes, W.	407			
Hogg, R.	237			
Murrell, J. M.	91			
Johnston, J. A.	14			
		6,415		6,350
Wellington Suburbs,—				
Luke, J. P.	2,204	..	3,887	
Fitzgerald, J. E.	1,908	..	2,737	
Williams, R. B.	1,367			
Moore, F. T.	644			
Young, W. T.	613			
Braithwaite, J. W.	54			
		6,790		6,624
Nelson,—				
Graham, J.	2,906	..	2,896	
Atmore, H.	2,712	..	2,882	
Moffatt, W. J.	316			
		5,934		5,778
Motueka,—				
McKenzie, R.	2,516			
Smith, F. W. O.	1,015			
		3,531		
Buller,—				
Colvin, J.	3,183			
Munro, F. F.	2,186			
McNamara, V. T.	149			
		5,518		
Grey,—				
Guinness, A. R.	3,407			
Kerr, J.	2,292			
		5,699		
Westland,—				
Seddon, T. E. Y.	2,830			
Michel, H. L.	2,720			
		5,550		
Wairau,—				
Duncan, J.	2,878			
McArtney, R.	2,626			
		5,504		
Hurunui,—				
Forbes, G. W.	2,056	..	2,150	
Clothier, O. F.	1,357	..	1,553	
Greenwood, G. D.	509			
Pulley, G. T.	309			
		4,231		3,703
Kaiapoi,—				
Buddo, D.	2,746			
Moore, R.	2,669			
		5,415		

Number of Votes recorded.				
Electoral District and Name of Candidate.	First Ballot.		Second Ballot.	
	For each Candidate.	Total.	For each Candidate.	Total.
Avon,—				
Russell, G. W.	2,189	..	3,426	
Tanner, W. W.	2,172	..	2,884	
Jamieson, J.	1,331			
Sullivan, D. G.	676			
Smith, W. R.	219			
		6,587		6,310
Riccarton,—				
Witty, G.	3,741			
Sheat, G.	2,141			
		5,882		
Christchurch North,—				
Taylor, T. E.	4,365			
Gray, C. M.	2,667			
Eeroyd, R. J.	405			
		7,437		
Christchurch East,—				
Davey, T. H.	3,497			
McCombs, J.	1,771			
Cooke, F. R.	506			
Boxshall, C.	469			
		6,243		
Christchurch South,—				
Ell, H. G.	3,500			
Thorn, J.	2,227			
Allison, C.	832			
		6,559		
Lyttelton,—				
Laurenson G.	3,682			
Thacker, H. T. J.	2,789			
		6,471		
Ellsmere,—				
Rhodes, R. H.	2,730			
Rennie, G.	1,828			
Rowell, F.	96			
		4,654		
Selwyn,—				
Hardy, C. A. C.	2,476			
Ivess, J.	2,093			
		4,569		
Ashburton,—				
Flatman, F. R.	2,316	..	2,267	
Nosworthy, W.	1,347	..	3,014	
Jones, D.	1,325			
Gobbe, J. D.	406			
Maslin, W. S.	276			
		5,670		5,281
Geraldine,—				
Jeffries, W.	1,971	..	2,249	
Buxton, T.	1,908	..	2,341	
Williams, W. H.	965			
		4,844		4,590

Electoral District and Name of Candidate.	Number of Votes recorded.			
	First Ballot.		Second Ballot.	
	For each Candidate.	Total.	For each Candidate.	Total.
Timaru,—				
Craigie, J.	2,610	..	3,349	
Campbell, W. D.	2,478	..	2,969	
Koller, J. T.	1,259			
Mahoney, J.	133			
		6,480		6,318
Waitaki,—				
Steward, Sir W. J.	2,490			
Smith, F. H.	2,161			
Harris, J.	161			
		4,812		
Oamaru,—				
Duncan, T.	2,735			
Mitchell, J.	2,122			
		4,857		
Tuapeka,—				
McPherson, J. A.	1,552	..	1,781	
Scott, R.	1,453	..	2,478	
Chapple, W. A.	1,301			
		4,306		4,259
Chalmers,—				
Allen, E. G.	2,556	..	2,409	
Clark, E. H.	2,463	..	2,635	
Barr, W.	102			
		5,121		5,044
Dunedin North,—				
Barclay, A. R.	3,284	..	3,376	
Thomson, G. M.	3,066	..	3,382	
Green, I.	532			
		6,882		6,758
Dunedin West,—				
Millar, J. A.	4,785			
Munro, J. W.	2,338			
		7,123		
Dunedin Central,—				
Arnold, J. F.	4,045			
McDonald, J.	2,533			
		6,578		
Dunedin South,—				
Sidey, T. K.	4,292			
Douglas, R. R.	2,462			
Fleming, W.	587			
		7,341		
Taieri,—				
McKenzie, T.	2,521			
Johnson, J. T., jun.	2,070			
		4,661		
Bruce,—				
Allen, J.	2,837			
Mosley, J.	1,444			
Tyndall, A. W.	646			
		4,927		

Electoral District and Name of Candidate.	Number of Votes recorded.			
	First Ballot.		Second Ballot.	
	For each Candidate.	Total	For each Candidate.	Total.
Clutha,—				
Malcolm, A. S.	2,318			
Isitt, F. W.	519			
		2,837		
Mataura,—				
Anderson, G. J.	2,508			
McNab, R.	2,142			
		4,650		
Wakatipu,—				
Fraser, W.	2,646			
Martin, A.	1,495			
		4,141		
Wallace,—				
Thomson, J. O.	2,971			
MacPherson, D.	1,625			
Ward, B.	40			
		4,636		
Invercargill,—				
Hanan, J. A.	3,119			
Paape, A. A.	2,271			
		5,390		
Awarua,—				
Ward, Rt. Hon. Sir J. G. ..	3,069			
Morris, W. A.	886			
Snowball, A.	595			
		4,550		

OCCUPATIONS OF MEMBERS OF HOUSE OF REPRESENTATIVES.

The occupations of European members show that farmers or run-holders furnish more members than any other class. There were twenty-five of these (besides three given as "settlers") returned in 1903. There were eight barristers or solicitors, and six journalists. The number of members returned in 1902, 1905, and 1908 was seventy-six, against seventy in 1896 and 1899:—

Occupations.	1896.	1899.	1902.	1905.	1908.
Professional—					
Scientist	—	—	—	—	1
Minister of religion	—	—	—	—	1
Law student	—	—	—	—	1
Secretary, Y.M.O.A.	—	—	—	1	1
Barrister, solicitor	5	9	10	9	8
Journalist	9	8	5	5	6
Mining advocate, interpreter, lecturer, teacher ..	3	4	1	3	1
Chemist	—	—	1	1	1

	Occupations.	1896.	1899.	1902.	1905.	1908
Domestic—						
Hotelkeeper		—	—	1	—	—
Commercial—						
Insurance manager		—	—	—	1	1
Land-broker, estate agent		—	—	2	3	2
Auctioneer		1	1	2	—	—
Director of financial company		—	1	1	1	1
Native agent		—	1	1	1	—
Stationer, bookseller, draper, grocer, butcher		3	6	5	3	2
Merchant, iron-merchant, timber-merchant		3	2	4	3	5
Storekeeper		1	2	2	2	1
Commission agent, clerk, accountant, commercial traveller		3	2	3	3	2
Transport and Communication—						
Coach-proprietor		—	—	1	—	—
Industrial—						
Tailor, shoemaker, dyer		2	2	3	3	1
Mill - owner, ship-rigger, builder, metallurgical engineer, mine-manager		4	2	2	2	1
Railway employee		—	—	—	1	1
Blacksmith		—	—	1	1	—
Mechanical engineer		—	—	—	—	1
Painter		—	—	—	—	1
Builder and contractor		—	—	—	—	1
Secretary, Workers' Union		—	—	—	—	1
Printer, newspaper-proprietor		—	—	2	1	2
Farmer		11	13	12	16	16
Sheep-farmer, runholder, grazier, stock-owner		14	7	9	5	9
Contractor		3	3	3	3	1
Others—						
Settler, gentleman, &c.		8	7	5	8	7

A summary of the population, number of electors on the rolls, and the total number of votes recorded at each of the last six general elections is next given :—

Year.	Total Population at Last Census.	Total Number of Electors on Rolls.	Number of Votes recorded.			Total Number of electors who recorded their votes.
			For Members elected.	For Candidates defeated.	Total.	
1893 ..	626,359	302,997	153,663	149,413	303,076	220,082
1896 ..	703,119	339,230	184,929	174,475	359,404	258,254
1899 ..	703,119	373,744	202,324	185,305	387,629	279,330
1902 ..	772,504	415,789	235,083	181,879	416,962	318,859
1905 ..	772,504	476,473	216,378	173,811	390,189	396,657
1908 ..	888,376	537,003	233,328	177,178	410,506*	428,648*

* The difference between these totals is owing to the fact that 13,546 persons who voted at the first ballot refrained from doing so on the second occasion, and 4,596 votes were rejected as informal.

Previous to the general election of 1905 the cities of Auckland, Wellington, Christchurch, and Dunedin each formed a single electorate returning three members, consequently every elector on the rolls of these places could exercise one vote for each of three candidates. The total of votes recorded was therefore greatly in excess of the number of persons who voted. In 1903 these cities were divided into single electorates, each returning one member, so that now in no case may any elector vote for more than one candidate.

In the succeeding table will be found a statement giving the results of each general election since the year 1853 for purposes of European representation.

GENERAL ELECTIONS FOR EUROPEAN REPRESENTATIVES HELD FROM THE YEAR 1853.

Parliament	Date of General Election.	Number of Names on Roll of Electors.	Number of Members returned.	Number of Members returned unopposed.	Numbers of Votes recorded (or of Voters recording Votes).	Population at end of Year.	Average Number of		
							Persons to each Member.	Persons to each Elector.	Electors to each Member.
First ..	1853 ¹	5,934	37	*	*	30,000	811	5·1	160
Second ..	1855 ²	10,324	37	*	*	37,192	1,005	3·6	279
Third ..	1861	13,466	53	*	*	79,711	1,504	5·9	254
Fourth ..	1866 ³	33,335	72	*	*	190,607	2,647	5·7	463
Fifth ..	1871	47,275	74	*	*	248,400	3,357	5·3	639
Sixth ..	1875	61,755	84	*	*	375,856	4,474	6·1	735
Seventh ..	1879	82,271	84	14	43,776	463,729	5,521	5·6	979
Eighth ..	1881	120,972	91	11	69,985	500,910	5,505	4·1	1,329
Ninth ..	1884	137,686	91	11	74,672	564,304	6,201	4·1	1,513
Tenth ..	1887	175,410	91	5	111,911	603,361	6,630	3·4	1,928
Eleventh ..	1890	183,171	70	6	136,337	625,508	8,936	3·4	2,617
Twelfth ..	1893	302,997	70	3	462,200	682,672	9,604	2·2	4,328
Thirteenth ..	1896	439,230	70	..	462,558	254,714	10,202	2·1	4,853
Fourteenth ..	1899	473,744	70	3	462,799	330,756	10,807	2·0	5,339
Fifteenth ..	1902	415,789	76	..	463,188	859,807	10,631	1·9	5,471
Sixteenth ..	1905	476,473	76	..	463,396	657,882	11,611	1·9	6,269
Seventeenth ..	1908	540,753	76	..	464,288	648,960	12,640	1·8	7,066

* Information not obtainable.

¹ Including 100, the estimated number in Akaroa district, for which there is no return.

² Including 800, the estimated number in the electorates of Town of New Plymouth Grey and Bell, and Omata, for which districts there are no returns.

³ Electors for the Electoral District of "The Otago Goldfields" not included.

⁴ Men and women.

⁵ Voters recording votes.

For Maori Representatives.

(Polling-day, 2nd December, 1908; number of polling-places, 344.)

Of a Maori population amounting to 47,731 persons at the census of 1906, 16,476 voted at the general election held in December, 1908, an increase of 431 on the number who voted at the election of 1905. In 1893 the voters numbered 11,269, or 1,739 persons fewer than in 1896, when 13,008 Maoris recorded their votes, while

at the general election held in December, 1899, the number of Maoris who voted was 13,628, in 1902 it was 14,271, and in 1905 the number who voted was 16,045.

The number of votes recorded in the several districts for each candidate were :—

Electoral Districts and Names of Candidates.	Number of Votes recorded.		Electoral Districts and Names of Candidates.	Number of Votes recorded	
	For each Candi- date.	Total.		For each Candi- date.	Total.
<i>Northern Maori :</i>			<i>Western Maori :</i>		
Hone Heke ..	.. 1,468		Henare Kaihau ..	2,375	
Hare te Rangi ..	423		Pepene Eketone ..	1,618	
	—	1,891	Te Heuheu Tukino ..	1,375	
			Hema te Ao ..	1,178	
			Eruera te Kahu ..	728	
				—	7,274
<i>Eastern Maori :</i>			<i>Southern Maori :</i>		
Apirana Ngata ..	4,740		Tame Parata ..	358	
Tiki Paaka ..	1,730		Teone Hopere Whare- witu Uru ..	351	
	—	6,470	Charles West ..	21	
				—	730

SECTION VI.—COMMERCE: TOTAL TRADE.

THE total trade of New Zealand for each of the years 1886 to 1910 will be seen from the figures given below. The volume grew steadily until the maximum was reached in 1907, when causes arising beyond the Dominion produced a general fall in prices of staple products. The total value of imports in 1910 was more than that for the previous year by £1,376,864, or 8·78 per cent. Exports increased in total value by £2,518,213, equal to 12·81 per cent. The value of the total trade in 1910 was greater than that of the previous year by £3,895,077, equal to an increase of 11·02 per cent.

The balance of trade for the year 1910 stands as follows:—

			£
Exports (excluding specie)	..	..	22,152,473
Imports	..	..	16,748,223
Excess of exports	..	..	5,404,250

The movement of specie during the same period resulted in a considerable balance on the import side.

			£
Specie imported, 1910	..	..	303,360
" exported	..	..	27,736
Balance of imports	..	..	275,624

The period for which New Zealand trade statistics are compiled embraces part of two season's wool clips, therefore the figures do not exhibit the full effect of fluctuations in prices of this staple for one season as compared with another. Although the year ending 31st March does not cover the whole season's export, it nevertheless includes the greater portion. The values of all imports and exports for the years ending 31st March 1910 and 1911 are—

		1909-10. £	1910-11. £	Increase or Decrease £
Imports (excluding specie)	..	14,774,377	17,385,066	2,610,689
Exports	..	21,467,657	21,437,205	-30,452
Excess of exports	..	6,693,280	4,052,139	
Specie imported	..	581,580	328,119	
" exported	..	24,152	46,695	
Excess of imports	..	557,428	374,814	

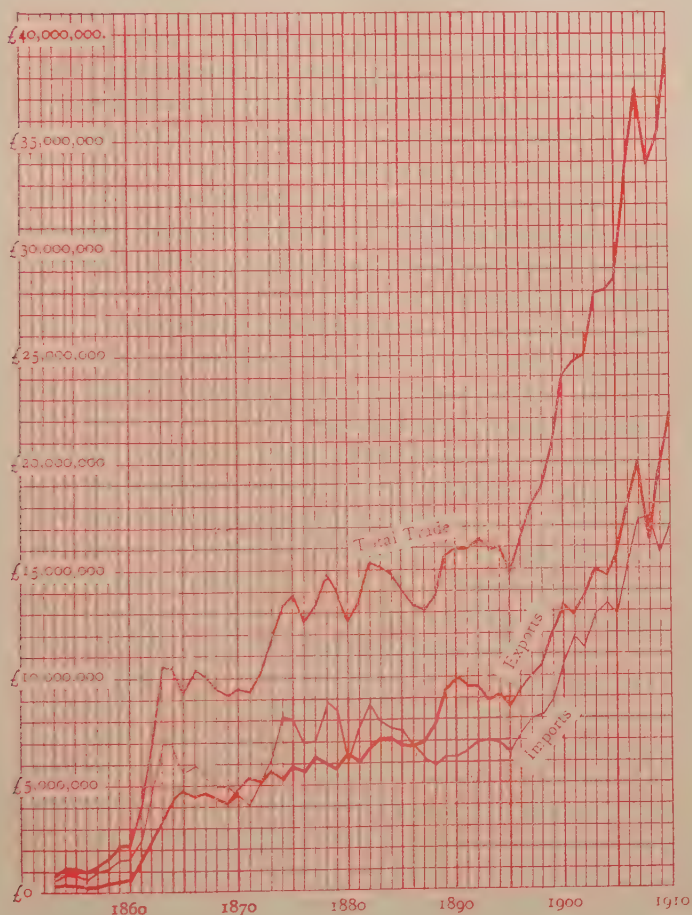
The value of the total trade of New Zealand advanced from £13,431,804 in the year 1886 to £39,231,792 in 1910. But of these

amounts some portion was coin. Excluding the specie, the figures for 1886 are £12,853,736, and for 1910 £38,900,696.

Year.	Total Trade.	Imports.	Exports.	Imports (excluding Specie).	Exports (excluding Specie).	Excess of Exports over Imports (excluding Specie).
	£	£	£	£	£	£
1886	13,431,804	6,759,013	6,672,791	6,319,223	6,534,513	215,290
1887	13,111,684	6,245,515	6,866,169	6,064,281	6,680,772	616,491
1888	13,709,225	5,941,900	7,767,325	5,430,050	7,403,206	1,972,156
1889	15,650,727	6,308,863	9,341,864	5,980,583	9,183,954	3,203,371
1890	16,072,245	6,260,525	9,811,720	5,928,895	9,569,316	3,640,421
1891	16,070,246	6,503,849	9,566,397	6,431,101	9,560,859	3,129,758
1892	16,477,907	6,943,056	9,534,851	6,742,544	9,490,920	2,748,376
1893	15,896,879	6,911,515	8,985,364	6,494,279	8,680,845	2,186,566
1894	16,019,067	6,788,020	9,231,047	5,990,177	9,221,550	3,231,373
1895	14,950,353	6,400,129	8,550,224	6,115,953	8,518,119	2,402,166
1896	16,458,425	7,137,320	9,321,105	7,035,379	9,299,907	2,264,528
1897	18,072,216	8,055,223	10,016,993	7,994,201	9,741,222	1,747,021
1898	18,748,555	8,230,600	10,517,955	8,211,409	10,449,838	2,238,429
1899	20,677,968	8,739,633	11,938,335	8,613,656	11,923,422	3,309,766
1900	23,892,257	10,646,096	13,246,161	10,207,326	13,223,258	3,015,932
1901	24,699,339	11,817,915	12,881,424	11,353,416	12,869,810	1,516,394
1902	24,971,700	11,326,723	13,644,977	10,958,038	13,635,459	2,677,421
1903	27,799,053	12,788,675	15,010,378	12,075,959	14,971,926	2,895,967
1904	28,040,042	13,291,694	14,748,348	12,900,030	14,738,750	1,838,720
1905	28,434,804	12,828,857	15,655,947	12,481,178	15,642,069	3,160,891
1906	33,306,540	15,211,403	18,095,137	14,303,170	17,992,480	3,689,310
1907	37,371,818	17,302,861	20,068,957	16,539,707	20,061,641	3,521,934
1908	33,788,778	17,471,284	16,317,494	17,247,162	16,075,205	1,171,957*
1909	35,336,715	15,674,719	19,661,996	14,817,462	19,636,151	4,818,689
1910	39,231,792	17,051,583	22,180,209	16,748,223	22,152,473	5,404,250

* Excess of imports.

GRAPHS SHOWING THE VALUES OF IMPORTS,
EXPORTS, AND THE TOTAL TRADE OF NEW
ZEALAND, 1853-1910.



EXPLANATION OF GRAPHS.—The base of each small rectangle represents an interval of one year, and the vertical height one million pounds sterling. The Total Trade is shown in the upper thick curve, the lower thick curve shows the Exports, and the thin curve the Imports.

Each year of the above series, until 1908, shows a balance in favour of exports, the aggregate amount to the end of last year being £64,273,263.

In the table given below the external trade is shown for each year per head of population, the calculations being made exclusive as well as inclusive of specie, for the purpose of arriving at exact conclusions as regards trade in goods. In the year 1894 the imported money amounted to a sum of £797,843, in 1903 to £712,716, in 1906 to £908,233, in 1907 to £763,154, and in 1910 to £303,360, making a substantial difference in the rates.

Excluding specie, the trade per head of population increased from £22 1s. 7d. in 1886 to £39 3s. 8d. in 1910: imports from £10 17s. 1d. to £16 17s. 5d., and exports from £11 4s. 6d. to £22 6s. 3d.

Year.	Including Specie.			Excluding Specie.		
	Total Trade per Head of Mean Population (excluding Maoris).	Imports per Head of Mean Population (excluding Maoris).	Exports per Head of Mean Population (excluding Maoris).	Total Trade per Head of Mean Population (excluding Maoris).	Imports per Head of Mean Population (excluding Maoris).	Exports per Head of Mean Population (excluding Maoris).
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1886	23 1 5	11 12 2	11 9 3	22 1 7	10 17 1	11 4 6
1887	21 19 8	10 9 5	11 10 3	21 7 5	10 3 4	11 4 1
1888	22 12 11	9 16 4	12 16 7	21 4 0	8 19 5	12 4 7
1889	25 9 11	10 5 6	15 4 5	24 15 9	9 15 6	15 0 3
1890	25 13 10	10 0 2	15 13 8	24 19 4	9 11 0	15 8 4
1891	25 10 4	10 6 6	15 3 10	25 7 10	10 4 3	15 3 7
1892	25 13 2	10 16 3	14 16 11	25 5 6	10 9 11	14 15 7
1893	24 0 9	10 9 0	13 11 9	22 18 11	9 16 5	13 2 6
1894	23 11 9	9 19 11	13 11 10	22 7 11	8 16 5	13 11 6
1895	21 11 10	9 4 10	12 7 0	21 2 8	8 16 8	12 6 0
1896	23 5 8	10 1 11	13 3 9	23 2 2	9 19 1	13 3 1
1897	25 0 11	11 3 3	13 17 8	24 11 7	11 1 7	13 10 0
1898	25 9 3	11 3 7	14 5 8	25 6 11	11 3 1	14 3 10
1899	27 11 5	11 13 1	15 18 4	27 7 8	11 9 8	15 18 0
1900	31 5 9	13 18 10	17 6 11	30 13 8	13 7 4	17 6 4
1901	31 15 0	15 3 10	16 11 2	31 2 9	14 11 11	16 10 10
1902	31 6 0	14 3 11	17 2 1	30 16 6	13 14 8	17 1 10
1903	33 17 10	15 11 10	18 6 0	32 19 6	14 14 5	18 5 1
1904	33 3 8	15 14 7	17 9 1	32 14 2	15 5 4	17 8 10
1905	32 14 10	14 14 11	17 19 11	32 6 6	14 6 11	17 19 7
1906	37 3 9	16 19 8	20 4 1	36 1 2	15 19 5	20 1 9
1907	40 13 3	18 16 6	21 16 9	39 16 6	17 19 11	21 16 7
1908	35 15 1	18 9 9	17 5 4	35 5 2	18 5 0	17 0 2
1909	36 7 3	16 2 7	20 4 8	35 9 1	15 4 11	20 4 2
1910	39 10 4	17 3 6	22 6 10	39 3 8	16 17 5	22 6 3

The highest record of trade (excluding specie) was that for 1874, when the rate per head was £41 4s. 5d., the imports amounting at that time to £24 17s. per head.

It has been customary to leave out the Maoris in estimating the sum per head, for their industries and necessities swell the volume of trade in comparatively so slight a measure that the amount per head of European population can be more truly ascertained by omitting them altogether.

The following table shows the value of imports and exports from each of the principal countries for the years 1906 to 1910. The countries mentioned are those from or to which the goods were shipped, not necessarily those of origin or final destination:—

TRADE WITH VARIOUS COUNTRIES, 1906-1910.

Countries.	1906.	1907.	1908.	1909.	1910.
<i>Imports.</i>					
From—	£	£	£	£	£
United Kingdom ..	9,003,229	10,278,019	10,441,837	9,287,786	10,498,771
New South Wales ..	1,462,928	1,776,896	1,658,498	1,275,003	1,463,986
Victoria ..	1,178,520	1,142,693	895,257	1,295,194	699,229
Other Australian States	133,864	207,964	287,671	194,013	196,178
South Africa ..	394	1,073	5,434	6,224	7,443
Canada ..	108,237	154,766	156,500	139,151	261,402
India and Ceylon ..	495,475	604,219	572,037	615,050	659,352
Other British possessions	507,369	776,553	762,982	742,541	679,463
United States of America	1,405,781	1,425,596	1,643,937	1,166,063	1,399,737
Germany ..	336,960	351,634	389,531	327,847	391,795
Belgium ..	116,359	113,500	104,647	76,708	100,749
Other foreign countries	462,287	469,948	552,893	549,139	693,478
Total ..	15,211,403	17,302,861	17,471,284	15,674,719	17,051,583
<i>Exports.</i>					
To—	£	£	£	£	£
United Kingdom ..	14,047,176	16,533,493	13,143,780	16,193,188	18,633,118
New South Wales ..	1,900,022	1,341,073	1,254,983	1,052,371	1,067,794
Victoria ..	891,443	795,883	764,254	783,277	874,471
Other Australian States	91,057	84,304	93,924	82,467	68,486
South Africa ..	88,674	63,727	86,491	121,962	45,665
Canada ..	7,704	17,989	11,248	77,286	160,842
India and Ceylon ..	62,020	117,730	107,146	138,163	132,628
Other British possessions	100,407	138,925	106,475	194,165	118,233
United States of America	642,792	714,063	326,415	684,810	553,603
Germany ..	54,952	66,489	40,191	77,969	205,931
Belgium ..	9,625	15,241	12,221	10,950	25,398
Other foreign countries	199,265	180,040	380,366	245,388	294,040
Total ..	18,095,137	20,068,957	16,317,494	19,661,916	22,180,209

TRADE WITH VARIOUS COUNTRIES, 1906-1910: PERCENTAGE TO TOTAL.

Countries.	1906.	1907.	1908.	1909.	1910.
<i>Imports.</i>					
From—	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
United Kingdom ..	59.19	59.40	59.77	59.25	61.57
New South Wales ..	9.61	10.28	9.49	8.14	8.59
Victoria ..	7.75	6.60	5.12	8.26	4.10
Other Australian States	0.88	1.20	1.65	1.24	1.15
South Africa ..	..	0.01	0.03	0.04	0.04
Canada ..	0.71	0.89	0.90	0.89	1.53
India and Ceylon ..	3.26	3.49	3.27	3.92	3.87
Other British possessions	3.34	4.49	4.37	4.74	3.98
United States of America	9.25	8.23	9.41	7.44	8.21
Germany ..	2.21	2.03	2.23	2.09	2.30
Belgium ..	0.76	0.66	0.60	0.49	0.59
Other foreign countries	3.04	2.72	3.16	3.50	4.07
Total ..	100.00	100.00	100.00	100.00	100.00
<i>Exports.</i>					
To—	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
United Kingdom ..	77.63	82.38	80.55	82.36	84.01
New South Wales ..	10.50	6.68	7.69	5.35	4.80
Victoria ..	4.93	3.96	4.68	3.98	3.94
Other Australian States	0.50	0.42	0.51	0.42	0.31
South Africa ..	0.49	0.32	0.53	0.62	0.21
Canada ..	0.04	0.09	0.07	0.39	0.73
India and Ceylon ..	0.34	0.59	0.66	0.70	0.60
Other British possessions	0.56	0.69	0.65	0.99	0.53
United States of America	3.55	3.56	2.00	3.48	2.50
Germany ..	0.31	0.33	0.25	0.40	0.93
Belgium ..	0.05	0.08	0.08	0.06	0.11
Other foreign countries	1.10	0.90	2.33	1.25	1.33
Total ..	100.00	100.00	100.00	100.00	100.00

According to statistics published by the British Board of Trade the value of goods received in the United Kingdom from New Zealand during 1909 was £17,730,866, of which goods valued at £4,083,367 were again exported. On the other hand, the f.o.b. value of shipments from the United Kingdom to New Zealand

during the same year was £7,351,619, excluding goods other than the produce of the United Kingdom, valued at £729,803. If to the former amount be added 10 per cent. to cover cost of freight and other charges it would appear that the c.i.f. value of goods the produce or manufacture of the United Kingdom sent to New Zealand was £8,086,780, against which produce of this country was imported and retained for home consumption in the United Kingdom to the value of £13,647,499.

The United Kingdom supplied during the past five years an average of 60 per cent. of the value of goods imported into and received 80·6 per cent. of the shipments from this country. Imports and exports from and to the Commonwealth of Australia averaged 12 and 18 per cent. respectively. The United States of America provide 8·8 per cent. of imports and receive 3·2 per cent. of the exports, while trade with Germany represents 2·17 per cent. and 0·44 per cent. respectively.

TRADE OF AUSTRALASIA.

The following table gives the value of the imports and exports of the different States comprising what is now the Commonwealth of Australia, and for New Zealand, for the year 1909. The Australian figures are taken from the Official Year-book of the Commonwealth:—

Country.	Total Value of		Excess of Exports over Imports
	Imports.	Exports.	
	£	£	£
States of the Commonwealth of Australia—			
New South Wales	35,589,000	39,392,000	3,803,000
Victoria	27,242,000	28,988,000	1,746,000
Queensland	10,184,000	14,842,000	4,658,000
South Australia (including Northern Territory)	11,333,000	12,644,000	1,311,000
Western Australia	6,405,000	8,740,000	2,335,000
Tasmania	3,130,000	3,424,000	294,000
New Zealand	15,675,000	19,662,000	3,987,000

In the preceding table is given the total trade inwards and outwards in each case, including oversea and inter-State transportations. In order to form a just idea of the trade of Australasia as a

whole, it is necessary to eliminate the inter-State traffic altogether which has been done in the figures given further on. Prior to the year 1891 the balance of Australasian external trade was in favour of the imports, but in that year the scale turned and exports exceeded the imports. This condition has obtained ever since until in the year 1909 the figures stood as under :—

EXTERNAL TRADE OF AUSTRALASIA.

Imports	..	..	..	..	..	£ 61,887,000
Exports	..	..	..	..	..	80,721,000
Total trade	..	..	..	..	..	142,608,000
Excess of exports over imports	..	..	..	..	..	18,834,000

The trade per head (oversea and inter-State) of the population in each of the States of the Australian Commonwealth and New Zealand in 1909 was :—

TRADE PER HEAD OF THE POPULATION IN 1909.

Country.	Imports.	Exports.	Total Trade.
	£ s. d.	£ s. d.	£ s. d.
States of the Commonwealth of Australia—			
New South Wales	22 3 3	24 10 7	46 13 10
Victoria	21 4 1	22 11 4	43 15 5
Queensland	18 0 5	26 5 3	44 5 8
South Australia (including Northern Territory)	27 12 0	30 15 9	58 7 9
Western Australia	23 12 9	32 5 1	55 17 10
Tasmania	16 19 11	18 11 10	35 11 9
New Zealand	16 2 7	20 4 8	36 7 3

Figures for the Australian States are again quoted from the Official Year-book of the Commonwealth. The values of the exports of the Australian States, more especially New South Wales, Victoria, and South Australia, are largely increased by the inclusion of articles the produce or manufacture of other States and countries.

The value of home productions or manufactures exported from each Australian State and for New Zealand in 1909, and the rate per head of mean population, were as follow :—

Country.	Home Produce exported.	Per Head of Population.
	£	£ s. d.
New South Wales	33,446,016	20 11 9
Victoria	20,777,888	16 3 8
Queensland	14,487,525	25 7 5
South Australia	8,845,483	21 10 9
Western Australia	9,593,058	31 5 7
Tasmania	3,344,984	18 3 3
New Zealand	19,462,936	20 0 7

The next table sets forth the amount of the trade of each of the above-named States and New Zealand with the United Kingdom in 1909 :—

Country.	Imports from the United Kingdom.	Exports to the United Kingdom.	Total Trade with the United Kingdom.
	£	£	£
New South Wales	12,333,869	10,384,438	22,718,307
Victoria	9,946,089	8,871,161	18,817,250
Queensland	3,284,249	3,767,437	7,051,686
South Australia	2,968,691	4,383,660	7,352,351
Western Australia	2,085,078	3,219,529	5,304,607
Tasmania (1907)	641,128	357,767	998,895
New Zealand	9,287,786	16,193,188	25,480,974

The statement appended shows the relative importance of Australasia as a market for the productions of the United Kingdom :—

EXPORTS OF HOME PRODUCTIONS FROM THE UNITED KINGDOM IN 1909, TO—

	£
British India and Ceylon	45,411,629
Germany	32,259,226
Australasia	31,350,464
United States of America	29,757,026
France	21,650,645
Argentine Republic	18,697,768
Canada	15,688,105
Cape of Good Hope, Transvaal, and Natal	13,612,328
Belgium	13,220,180
Italy	12,141,700
Netherlands	11,751,043
Russia	10,954,243
Brazil	8,501,090
China (excluding Hong Kong)	8,445,832
Japan	8,353,252
Egypt	7,981,973
Turkey	7,611,054
Sweden	6,187,202
Denmark	5,176,848
Spain	4,856,602
Chili	4,732,037
Java	3,738,006
Straits Settlements	3,668,702
Hong Kong	3,567,350
Austria-Hungary	3,536,750
Norway	3,447,331
Portuguese East Africa	3,270,285
West India Islands and British Guiana	3,032,030
Switzerland	2,861,149
Nigeria	2,705,958
Uruguay	2,347,062
Portugal	2,320,222
Mexico	2,106,234

The exports to other countries did not amount to £2,000,000 in any one case.

Australasia as a whole, with a population of about 5,400,000, thus takes the third place in importance for consumption of British produce, the exports thereto being three-fifths the value of similar exports to British India, with its 300,000,000 inhabitants.

RECIPROCAL TRADE.

The following are the reciprocal provisions of the Customs Duties Act, 1908, sections 9 and 10 :—

Where any country, being part of the British Dominions, reduces or abolishes, or proposes to do so, the duty on any product or manufacture of New Zealand, the Governor is authorized to enter into an agreement to reduce or abolish the duty on any articles the produce or manufacture of such country to an extent that the estimated revenue so remitted shall equal as nearly as possible the remission by that country. Such agreements, however, require ratification by Parliament.

Similarly, where any country not being part of the British Dominions, reduces or abolishes, or proposes to do so, the duty on any product or manufacture of New Zealand, the Governor is authorized, subject to or by virtue of a treaty with His Majesty, to negotiate for an agreement to reduce or abolish the duty on any articles the produce or manufacture of such country to an extent that the estimated revenue so remitted in New Zealand shall equal as nearly as possible what is remitted by that country, subject to Parliamentary ratification.

A treaty is at present in force between New Zealand, the British South African Colonies composing the Union, and Southern Rhodesia, by which certain concessions as to tariff rates are made on both sides. A schedule of the goods affected will be found in Section VII

COMMERCE—continued.

SECTION VII.—IMPORTS: CUSTOMS AND EXCISE REVENUE AND CUSTOMS TARIFF.

IMPORTS.

THE quantities and values of imports used in making up the figures given in this portion of the statistical information are obtained from Customs entries, verified where necessary, as with goods subject to an *ad valorem* duty, by examination. In estimating the value of *ad valorem* goods, such value is understood to be the fair market value thereof when sold for home consumption in the principal markets of the country whence and at the time when the same were exported, including the value of the case, cask, or covering of any kind in which such goods are contained, with 10 per cent. added (section 55, the Customs Law Act, 1908). Value of all other goods includes freight and charges to time of arrival at port of discharge. Goods transhipped at a foreign port are regarded as imported from the country where they were originally shipped. The countries named, however, may not be those of origin, as no attempt is made to trace the goods beyond the ports disclosed by the documents presented to the Customs. Very little cargo *in transitu* passes through New Zealand.

The total declared values of the imports in 1910 amounted to £17,051,583, being an increase on the corresponding total in 1909 of £1,376,864. These figures, however, include specie. The value of coin brought into the Dominion in 1910 was £303,360, against £857,257 in the previous year, and if these amounts are excluded the increase on the value of merchandise is £1,930,761.

The value of imports for the year 1890, and for each of the ten latest years was:—

Year.				Imports, inclusive of Specie. £	Imports, exclusive of Specie. £
1890	..	..	..	6,260,525	5,928,895
1901	..	..	..	11,817,915	11,353,416
1902	..	..	..	11,326,723	10,958,038
1903	..	..	..	12,788,675	12,075,959
1904	..	..	..	13,291,694	12,900,030
1905	..	..	..	12,828,857	12,481,178
1906	..	..	..	15,211,403	14,303,170
1907	..	..	..	17,302,861	16,539,707
1908	..	..	..	17,471,284	17,247,162
1909	..	..	..	15,674,719	14,817,462
1910	..	..	..	17,051,583	16,748,223

In 1901 the Government imported railway plant valued at half a million sterling, against far smaller quantities introduced in the subsequent years.

The value of imports, exclusive of specie, rose from £5,928,895 in 1890 to £6,115,953 in 1895, after which there ensued a steady advance to £17,247,162 in 1908. In 1909, as before stated, there was a considerable falling off, but the returns for 1910 show an increase of £1,930,761 in the value of the imports.

The expansion of imports is still further to be considered in connection with the condition of the manufactures of the Dominion, for an increase of imports arising from a decline of internal manufactures would scarcely be regarded as a satisfactory position. That there has been great development of the manufactures of New Zealand since 1895, not only in the great primary industries, but throughout, is exhibited in the section giving the results of an inquiry made at the census of 1906 relative to manufactories and works.

It is desirable to consider not only the total value of the import trade for different years by comparing totals, but to ascertain the rates per head of population, to judge whether the imports are relatively greater or less than they have been. The fairest comparisons are from calculations made after deducting specie imported, as the amount of this commodity fluctuates widely. The figures for 1890 and each year from 1901 onwards stand thus:—

Years.	Imports per Head of mean Population excluding Maoris.						
	Including Specie.			Excluding Specie.			
	£	s.	d.	£	s.	d.	
1890	10	0	2	9	11	0	
1901	15	3	10	14	11	11	
1902	14	3	11	13	14	8	
1903	15	11	10	14	14	5	
1904	15	14	7	15	5	4	
1905	14	14	11	14	6	11	
1906	16	19	8	15	19	5	
1907	18	16	6	17	19	11	
1908	18	9	9	18	5	0	
1909	16	2	7	15	4	11	
1910	17	3	6	16	17	5	

Using the figures exclusive of the specie, comparisons for the years since 1901 show that the value of imports per head of population increased annually with almost unbroken regularity until 1905. For the ensuing three years there was considerable increase in the rate; then an appreciable decrease in 1909, and finally an increase in 1910.

IMPORTS, NORTH AND SOUTH ISLANDS.

Separating the value of the imports entered at the ports of the North Island from that of the South Island, it is found that while in 1899 the former received imported goods to the value of £4,727,039 against £3,942,500, for the South Island, in the year 1910

the North Island imports exceeded those of the other to a far greater extent, the values being respectively £10,311,658 and £6,432,626.

IMPORTS, BY PROVINCIAL DISTRICTS.

The value of imports recorded for each provincial district is the value of the goods entered at the port or ports situate within the district, but information is not at present available to enable the whole of the imported goods to be traced to their actual destination, so that the figures must not be taken to represent the value of imports consumed within the several districts.

The values of imports in each provincial district during 1900 and 1910 were as under:—

	1900.	1910.
	£	£
Auckland	2,678,129	4,902,654
Taranaki	82,899	187,311
Hawke's Bay	209,418	384,595
Wellington	2,912,333	4,837,098
Marlborough	17,533	39,637
Nelson	178,264	186,842
Westland	72,153	127,789
Canterbury	1,913,799	3,028,286
Otago	2,493,906	3,050,042

The value of imports by parcel-post (£87,662 in 1900 and £307,299 in 1910) must be added to the above figures in order to make up the totals (including specie) of £10,646,096 and £17,051,583 for the respective years.

IMPORTS, BY PORTS.

The following table gives the value of the imports for each port in New Zealand for years 1910, 1909, 1908, 1900, 1890, arranged in order of magnitude for 1910:—

	1910.	1909.	1908.	1900.	1890.
	£	£	£	£	£
Auckland ..	4,741,326	4,333,857	4,671,295	2,617,329	1,385,959
Wellington ..	4,625,711	4,475,547	5,040,901	2,767,066	1,233,184
Lyttelton and Christchurch ..	2,718,355	2,377,364	2,627,623	1,770,709	1,174,370
Dunedin ..	2,465,273	2,258,427	2,499,019	2,158,177	1,662,629
Invercargill & Bluff ..	506,905	437,358	521,180	288,170	120,050
Napier ..	334,595	350,788	467,837	209,418	162,097
Timaru ..	309,931	282,129	317,114	143,090	95,202
Wanganui ..	211,387	200,585	259,428	145,267	49,637
New Plymouth ..	158,782	115,090	122,110	67,338	12,971
Poverty Bay ..	150,330	123,311	139,714	49,278	17,731
Nelson ..	126,774	115,713	140,856	140,514	141,980
Greymouth ..	113,333	99,429	109,590	59,460	79,877
Oamaru ..	77,864	71,134	66,323	47,559	54,075
Westport ..	60,068	57,959	63,950	37,750	9,442
Wairau and Picton ..	39,667	35,495	32,805	17,533	19,547
Patea ..	28,529	23,566	29,904	15,561	11,604
Hokitika ..	14,456	23,311	22,096	12,693	13,549
Kaipara ..	9,269	8,009	14,966	7,883	1,294
Tauranga ..	1,729	663	1,152	3,639	1,493

IMPORTS FROM DIFFERENT COUNTRIES.

In dealing with the imports from the different countries it must be pointed out that the trade returns of New Zealand do not disclose the countries of origin, goods being credited in every case to the countries of shipment. This, no doubt, is a serious defect in the statistics, especially in the case of shipments from the United Kingdom to New Zealand. Of the goods imported from the United Kingdom in 1910, valued at £10,498,771, it is estimated that about 90·97 per cent. was the produce or manufacture of Britain and Ireland, the balance being re-exports, the origin of which has not been traced.

The figures given below show for ten years the imports from the United Kingdom, with those from the British colonies and possessions, and from foreign States :—

Imports from				
		United Kingdom.	British Colonies and Possessions.	Foreign States.
		£	£	£
1901	.. ..	6,885,831	2,913,866	2,018,218
1902	.. ..	6,851,452	2,583,005	1,892,266
1903	.. ..	7,512,668	3,135,474	2,140,533
1904	.. ..	7,982,340	3,047,354	2,262,000
1905	.. ..	7,795,284	2,914,358	2,119,215
1906	.. ..	9,003,229	3,886,787	2,321,987
1907	.. ..	10,278,019	4,664,164	2,360,678
1908	.. ..	10,441,837	4,338,439	2,691,008
1909	.. ..	9,287,786	4,267,176	2,119,757
1910	.. ..	10,498,771	3,967,053	2,585,759

The proportions represented by the above figures in every one hundred pounds' value of total imports are :—

				United Kingdom.	British Colonies and Possessions.	Foreign States.
				Per Cent.	Per Cent.	Per Cent.
1901	.. ..	.. ..	.. ..	58·26	24·66	17·08
1902	.. ..	.. ..	.. ..	60·49	22·80	16·71
1903	.. ..	.. ..	.. ..	58·74	24·52	16·74
1904	.. ..	.. ..	.. ..	60·05	22·93	17·02
1905	.. ..	.. ..	.. ..	60·76	22·72	16·52
1906	.. ..	.. ..	.. ..	59·19	25·55	15·26
1907	.. ..	.. ..	.. ..	59·40	26·96	13·64
1908	.. ..	.. ..	.. ..	59·77	24·83	15·40
1909	.. ..	.. ..	.. ..	59·25	27·22	13·53
1910	.. ..	.. ..	.. ..	61·57	23·27	15·16

The exports from the United Kingdom to New Zealand, as given in the United Kingdom trade returns, for the period 1900–1909, distinguishing between the value of goods of British and Irish produce and those the produce of other countries re-exported, are

next shown. These values are f.o.b., while those recorded in the New Zealand returns are c.i.f. :—

Year.	British and Irish Produce ex- ported from the United Kingdom to New Zealand.	Produce of other Countries re- exported to New Zealand.	Total Exports from the United King- dom to New Zealand.
	£	£	£
1900	5,485,845	413,447	5,899,292
1901	5,599,272	468,958	6,068,230
1902	5,676,576	481,309	6,158,885
1903	6,361,390	593,430	6,954,820
1904	6,315,090	582,330	6,897,420
1905	6,425,793	569,013	6,994,806
1906	7,400,188	652,288	8,052,476
1907	8,700,941	740,967	9,441,908
1908	8,767,003	746,171	9,513,174
1909	7,351,619	729,803	8,081,422

Imports from the Commonwealth of Australia include considerable quantities of goods, the produce of the United Kingdom and foreign countries transhipped at Australian ports for New Zealand. This element would further disturb the values credited to foreign countries if Canadian goods shipped at ports in the United States to New Zealand were assigned to the country of origin.

The following is the value of imports from different countries or places in 1910 and 1909, given in the order of the increase or decrease :—

Country.	1910. £	1909. £	Increase. £
United Kingdom ..	10,498,771	9,287,786	1,210,985
United States of America ..	1,399,737	1,166,063	233,674
New South Wales ..	1,463,986	1,275,003	188,983
Germany ..	391,795	327,847	63,948
Canada ..	261,402	198,384	63,018
France ..	127,230	88,766	38,464
Bengal ..	398,308	366,639	31,669
Friendly Islands ..	45,797	20,792	25,005
Belgium ..	100,749	76,708	24,041
Ceylon ..	248,476	230,499	17,977
Japan ..	103,113	86,865	16,248
Holland ..	58,189	46,707	11,482
Italy ..	33,478	22,950	10,528
Sweden ..	42,728	35,525	7,203
Java ..	75,965	68,943	7,022
Tasmania ..	57,150	50,570	6,580

Country.	1910. £	1909. £	Increase. £
Turkey	13,864	7,352	6,512
Christmas Island (British) ..	10,557	6,219	4,338
Spain	13,844	9,608	4,236
New Caledonia	4,198	51	4,147
Hong Kong	20,313	16,857	3,456
Society Islands	11,964	9,122	2,842
China	10,019	7,502	2,517
Seychelles	2,478	..	2,478
Greece	29,945	27,790	2,155
Denmark	7,341	5,313	2,028
Switzerland	12,171	10,259	1,912
Foreign West Indies	3,240	1,393	1,847
South Australia	45,634	43,935	1,699
Russia	3,069	1,426	1,643
Queensland	3,687	2,301	1,386
Ocean Island	8,575	7,500	1,075
Cape Colony	7,064	6,059	1,005
Madras	1,450	519	931
Austria-Hungary	10,097	9,097	1,000
Navigator Islands	2,542	1,816	726
British West Indies	1,061	580	481
Asia Minor	40,297	39,873	424
Egypt	1,732	1,389	343
Norfolk Island	557	295	262
Flores Island	238	..	238
Natal	328	118	210
Portugal	3,810	3,702	108
Guatemala	54	..	54
Penang	38	..	38
British East Africa	57	29	28
Brazil	96	67	29
Transvaal	51	38	13
Chili	12	..	12
Madagascar	17	5	12
Tripoli	12	..	12
Siberia	10	..	10
Syria	5	..	5
New Guinea	4	..	4
Mexico	5	1	4
New Hebrides	5	1	4
Solomon Islands	5	3	2
Pitcairn Island	1	..	1
Gibraltar	1	..	1
Argentine Republic	1	..	1

Country.	1910. £	1909. £	Decrease. £
Victoria	699,229	1,295,194	595,965
Fiji	580,084	590,214	10,130
Western Australia	89,707	97,207	7,500
Burmah	10,885	16,552	5,667
Singapore	40,905	43,752	2,847
Malden Island	14,658	16,979	2,321
Surprise Islands	5,345	7,172	1,827
Norway	18,534	19,445	911
Arabia	1,484	2,252	768
Bombay	233	841	608
Malta	151	699	548
Philippine Islands	12,539	12,879	340
Persia	283	501	218
Sumatra	34	141	107
Cochin-China	45	145	100
Aden	27	120	93
Canary Islands	80	148	68
Mauritius	..	57	57
Uruguay	..	47	47
Christmas Island (Foreign)	..	38	38
Morocco	7	14	7
Orange River Colony	..	6	6
Straits Settlement	..	6	6
Alaska	..	6	6
Rhodesia	..	3	3
Sandwich Islands	30	33	3
British West Africa	..	1	1

ARTICLES OF IMPORT.

Imports for the five years 1906 to 1910, classified according to the nature of the goods, were as follows:—

IMPORTS FOR FIVE YEARS.

Group of Principal Articles imported.	1906.	1907.	1908.	1909.	1910.
	£	£	£	£	£
Apparel, including hats and caps	860,442	949,780	972,775	930,590	1,053,074
Boots and shoes ..	314,358	300,885	288,544	258,738	271,984
Drapery, haberdashery, linens, woollens, and other textiles	1,939,788	2,255,574	2,354,440	2,105,490	2,283,668
Hosiery ..	160,977	189,880	191,596	155,002	163,861
Silks ..	96,111	95,248	60,138	41,706	59,437
Totals..	3,371,676	3,791,367	3,867,493	3,491,526	3,832,024

IMPORTS FOR FIVE YEARS—*continued.*

Group of Principal Articles imported.	1906.	1907.	1908.	1909.	1910.
	£	£	£	£	£
Iron and steel (pig, wrought, wire, &c., and galvanized)	1,123,092	1,266,055	1,235,943	976,198	1,173,716
Railway and tramway plant	347,424	233,298	221,976	191,057	200,653
Machinery	645,882	767,536	698,465	583,448	640,189
Sewing and knitting machines	42,706	38,734	53,453	58,821	57,068
Hardware and ironmongery	408,783	485,150	452,606	328,745	417,402
Tools and implements (including agricultural)	299,927	293,793	381,786	265,830	299,560
Nails	52,670	60,166	67,966	45,625	70,232
Other metals and metal manufactures	397,397	502,506	558,943	450,648	494,747
Totals	3,317,881	3,647,238	3,671,138	2,900,372	3,353,567
Sugar	451,206	569,472	592,849	613,950	623,538
Tea	229,469	268,556	252,345	279,900	293,955
Totals	680,675	838,028	845,194	893,850	917,493
Beer	45,726	54,804	54,965	46,544	53,086
Spirits*	294,073	304,733	316,295	291,515	332,734
Tobacco	330,454	372,322	361,769	353,612	447,407
Wine	65,028	73,930	76,032	70,493	77,826
Totals	735,281	805,789	809,061	762,164	911,053
Paper	243,588	276,632	302,437	263,044	305,584
Printed books ..	177,509	184,125	207,282	187,690	213,328
Stationery	177,241	189,105	209,264	179,279	192,483
Totals	598,338	649,862	718,983	630,013	711,395
Miscellaneous (specified articles)—					
Arms, ammunition, and explosives	96,438	137,069	142,297	145,837	136,982
Automobiles, motor-cars, and motor-cycles, and materials for	79,821	192,110	249,929	182,257	293,015
Bags and sacks ..	121,492	156,976	161,278	180,705	211,763
Bicycles and tricycles	71,692	57,721	34,083	22,881	31,139
Bicycle and tricycle fittings	127,916	127,790	149,934	128,881	176,899
Candles	48,522	41,523	36,092	44,090	37,960
Canvas	60,763	66,565	65,599	59,067	59,806
Carpeting and druggeting	70,694	77,243	70,475	61,653	73,473

* Includes methylated and perfumed spirits and spirits of wine.

IMPORTS FOR FIVE YEARS—*continued.*

Group of Principal Articles imported.	1906.	1907.	1908.	1909.	1910.
Miscellaneous— <i>contd.</i>	£	£	£	£	£
Carts, carriages, and materials for	67,117	82,721	97,808	60,109	78,277
Cement	65,549	106,361	68,468	46,956	52,496
China, porcelain, earthenware, and parianware	115,074	154,665	156,633	119,097	143,168
Coal	195,141	213,377	274,605	253,081	230,765
Drugs, chemicals, and druggists' wares	372,628	383,886	394,170	373,696	415,904
Fancy goods and toys	170,529	202,321	250,426	210,259	234,118
Fish (preserved and potted)	54,608	65,574	77,912	63,203	68,635
Floorcloth and oil-cloth	96,546	111,371	123,661	98,607	125,255
Fruits (including fresh, preserved, bottled, and dried)	280,274	398,259	354,732	318,477	340,281
Furniture, cabinetware, and upholstery	78,820	96,101	118,235	62,086	74,471
Glass and glassware	175,837	192,496	220,527	162,038	184,627
Leather and leather-manufactures	141,197	161,025	188,090	178,348	169,141
Manures	209,838	234,739	254,054	269,453	273,383
Musical instruments and materials for	128,070	136,459	132,202	106,278	133,414
Seeds	96,388	201,795	145,450	124,148	100,110
Oil	291,228	311,455	410,510	329,289	414,742
Timber	197,585	270,770	443,938	311,472	258,076
Woolpacks and wool-pockets	56,059	76,394	55,468	48,522	57,628
Total miscellaneous (specified articles)	3,469,826	4,256,771	4,676,576	3,960,490	4,375,828
Other imports (excluding specie)	1,129,493	2,550,612	2,658,717	2,179,047	2,646,863
Total imports (excluding specie)	14,303,170	16,539,707	17,247,162	14,817,462	16,748,223
Specie imported ..	908,233	763,154	224,122	857,257	303,360
Total imports ..	15,211,403	17,302,861	17,471,284	15,674,719	17,051,583

Adopting the same classification as in the foregoing table the total value for each group is shown for the years 1900 and 1910, distinguishing imports from the United Kingdom, British possessions, United States of America, Germany, and other foreign countries.

Annual Imports from

	Years.	United Kingdom.	British Possessions.	Foreign Countries.			Total Foreign Countries.
				United States.	Germany.	Others.	
Textiles, boots and shoes, drapery and clothing	1900	£ 2,280,002	£ 97,362	£ 69,417	£ 12,254	£ 28,937	£ 110,608
	1910	3,496,093	172,875	49,718	24,010	89,328	163,056
Iron and steel, machinery, hardware, tools, and other manufactures of iron and steel	1900	1,797,105	244,657	338,976	24,092	34,279	397,347
	1910	2,509,285	302,845	414,241	69,802	57,394	541,437
Sugar and tea	1900	1,642	647,538	1,036	630	634	2,300
	1910	910	850,241	7,348	1	58,993	66,342
Beer, wine, spirits, and tobacco	1900	249,317	68,803	136,624	8,329	23,464	168,417
	1910	571,459	193,080	91,784	8,967	45,763	146,514
Paper, books, and stationery	1900	280,208	50,513	68,914	7,731	1,494	78,139
	1910	485,650	146,218	33,641	25,485	20,401	79,527
Miscellaneous articles	1900	1,845,510	1,128,529	446,906	129,038	183,385	759,329
	1910	3,431,327	2,003,164	803,005	263,530	521,465	1,588,000
Specie	1900	50,700	387,970	..	..	100	100
	1910	3,847	298,690	..	..	883	883
Total imports	1900	6,504,484	2,625,372	1,061,873	182,074	272,293	1,516,240
	1910	10,498,771	3,967,053	1,399,737	391,795	794,227	2,585,759

PRINCIPAL IMPORTS FROM BRITISH COUNTRIES.

The goods enumerated below, although shipped from ports in the countries indicated, are not necessarily all the produce or manufacture of those countries. As already stated, only about 90·97 per cent. of the total imports from the United Kingdom is the produce of that country, the balance being reshipments.

United Kingdom.—Acid, £11,589; alkali, £32,804; animals, living, £12,707; apparels and slops, £779,320; arms, ammunition, and explosives, £118,034; asphalt, £1,730; bags and sacks, £1,093; basketware and wickerware, £1,511; beer, £50,229; belting, £29,684; beverages, non-alcoholic, £18,651; bicycles and tricycles, £37,473; bicycles and tricycles, materials for, £115,050; biscuits, £5,253; blacking, £27,031; blacklead, £6,121; blue, £8,693; books, printed, £151,000; boots and shoes, £227,347; borax, £5,407; brass, £6,283; bricks, £877; bronze, ingots, £973; brushes, brushware, and brooms, £38,185; candles, £29,136; canvas, £53,191; carpeting and drug-geting, £72,120; carriages, £3,771; bodies for motor vehicles, £31,307; chassis for motor vehicles, £126,011; materials for motor vehicles, £35,371; materials for steam motor lorries, £17,342; carriage and cart makers' materials, £23,952; cement, £52,338; chains and chain cables, £13,340; china, porcelain, and parian ware, £29,819; clocks, £5,093; cocoa and chocolate, £27,472; cocoa-beans, £3,037; cocoa butter, £8,810; confectionery, £58,861; copper, £20,402; combs, £5,667; cordage, £39,612; cork, cut, £3,150; cotton piece-goods, £816,820; cotton, £14,622; drapery, £538,968; drugs, chemicals, and druggists' wares, £245,062; dyes, £7,631; earthenware, £82,109; engine-packing, £12,370; essences, £9,419; essential oils, £4,492; fancy goods and toys, £145,036; felt sheathing, £5,034; fire engines and extinguishers, £2,958; fish, preserved, &c., £26,731; fishing-tackle, £5,374; floorcloth and oilcloth, £124,099; foods, farinaceous, £34,285; fruits, dried, £9,274; furniture, cabinetware, and upholstery, £23,081; furniture, knife and plate powder and polish, £5,053; furs, £10,296; gelatine and isinglass, £4,942; glass bottles, empty, £29,480; glass, plate, £32,596; glass, window, £20,520; glassware, £18,569; grindery, £27,423; haberdashery, £128,203; hardware, hollow-ware, and ironmongery, £332,773; hats and caps, £88,274; hatters' materials, £26,254; hose—canvas, indiarubber, &c., £14,546; hosiery, £160,654; indiarubber and gutta-percha goods, £4,324; ink, £7,536; instruments, musical, £74,815; instruments, scientific, £5,037; instruments, surgical and dental, £16,074; iron and steel—angle, £9,014; bar, bolt, and rod, £156,501; bolts and nuts, £28,623; hoop, £22,968; pig, £34,534; pipes and fittings, £185,965; rails, £140,597; sheet and plate, £56,335; sheet, galvanized and corrugated, £270,603; sheet, galvanized, plain, £51,886; tanks, £13,003; wire fencing, £100,038; wire netting, £51,151; wire, telegraph and telephone, £5,556; jams, jellies, and preserves, £9,070; jewellery, £8,224; lamps, lanterns, and lampwick, £25,808; lead, £9,535; leather, £67,693; leather-manufactures, £14,273; linen piece-goods, £96,491; machines and machinery, £483,637; manures, £55,140; matches, £22,186; mats and matting, £7,153; metals, manufactures of, £258,499; milk, preserved, £5,554; millinery, £75,683; mustard, £13,468; nails, £29,768; oils, £89,027; oilmen's stores, £13,872; paints and colours, £105,884; paper—paperhangings, £39,652; printing, £92,025; writing, £40,704; other kinds, £18,648; perfumery, £16,597; photographic goods, £27,274; plate and platedware, £77,327; printing materials, £8,275; provisions, n.o.e., £10,048; resin, £5,272; rugs, £18,123; saddlery and harness, £61,303; salt, £33,056; sauces, &c., £12,095; seeds, £53,395; silks, £25,920; soap, £28,657; spirits, £274,000; starch, £12,684; stationery, £140,107; textile piece-goods, other than silk, cotton, linen, or woollen, £336,475; tin and tinware, £77,684; tobacco, cigars, cigarettes, and snuff, £218,626; tobacco pipes and cases, £18,601; tools and implements, £96,596; twine, £30,276; umbrellas and parasols, and materials for, £23,688; varnish,

lacquers, and gold-size, £17,465; vinegar, £7,390; watches and watchmakers' materials, £8,333; wine, £24,234; woodenware, £10,948; woollen piece-goods, £206,739; yarns, £11,310; zinc, £8,235.

New South Wales.—Acid, £1,304; alkali, £1,383; animals, living, £13,012; apparel and slops, £11,085; bags and sacks, £1,174; beverages, non-alcoholic, £1,443; bicycles, tricycles, and materials for, £1,415; books, &c., printed, £25,904; boots and shoes, £5,818; brushes, brushware, and brooms, and materials for, £1,336; canvas, £2,005; carriages, £16,021; charcoal, £1,390; coals, £230,627; coffee, £1,259; coke, £4,338; confectionery, £2,336; copper, £6,958; cordage, £5,450; cork, cut, £1,233; cotton piece-goods, £14,941; drapery, £9,012; drugs, chemicals, and druggists' wares, £69,071; dyes, £2,082; earthenware, £1,801; engine-packing, £2,384; fancy goods and toys, £28,193; fish, potted and preserved, £1,510; flour, £13,768; foods, animal, £1,908; foods, farinaceous, £7,253; fruits, dried, £3,055; fruits, fresh, £49,993; furniture, cabinetwork, and upholstery, £1,840; furs, £1,176; glass bottles, empty, £7,714; grain and pulse, £4,472; grindery, £2,262; haberdashery, £2,923; hardware, hollow-ware, and ironmongery, £6,629; hats and caps, £1,985; hatters' materials, £1,935; hides, £2,359; hose—canvas, indiarubber, &c., £1,522; indiarubber and gutta-percha goods, £1,586; instruments, musical, £2,226; surgical and scientific, £3,396; iron and steel, £22,592; lamps, lanterns, and lampwick, £1,906; lead, £26,004; leather, £19,706; linen piece-goods, £8,100; machinery and machines, £54,145; manures, £60,430; marble, £1,590; manufactured metal, articles of, £17,494; millinery, £1,538; mouldings and panels, £1,054; nuts, £1,147; oils, £7,002; paints and colours, £1,351; paper, £2,452; perfumery, &c., £4,443; photographic goods, £1,861; plants, shrubs, £2,806; plate and platedware, £2,733; potatoes, £2,215; printing materials, £3,959; provisions, £1,382; rice, £16,741; salt, £1,785; seeds, £7,881; silks, £5,018; soap, £25,653; specie—gold, £295,000; silver, £2,000; spices, £1,228; spirits, £7,759; spirits of wine, £7,232; stationery, £8,266; stone, £3,506; sugar, refined, £1,224; tanning materials, £2,243; tea, £12,067; textile piece-goods, £14,035; timber, £96,761; tin, £13,199; tobacco, cigars, cigarettes, and snuff, £13,288; tools and implements, £3,897; umbrellas and parasols, materials for, £1,983; varnish, lacquers, and gold-size, £1,205; wax, £1,877; wine, £7,443; woodenware, £2,876; wool, £9,581; woollen piece-goods, £5,228.

Victoria.—Acid and alkali, £2,301; animals, living, £3,118; apparel and slops, £6,744; arms, ammunition, and explosives, £2,218; belting, leather, £1,656; bicycles and tricycles, materials for, £49,368; books, &c., printed, £26,633; boots and shoes, £3,566; brushes, &c., and materials for, £1,335; carriages, &c., and materials for, £20,089; coffee, £3,469; cotton piece-goods, £9,033; drapery, £5,957; drugs, chemicals, and druggists' wares, £13,461; dyes, £2,204; earthenware, £1,673; essential oils, £2,993; fancy goods and toys, £3,577; flour, £12,699; animal foods, £13,473; farinaceous foods, £2,705; fruits, bottled and preserved, £2,068; fruits, dried, £6,111; fruits, fresh, £15,137; furs, £1,036; glass bottles, empty, £2,044; grindery, £5,993; haberdashery, £1,231; hardware, hollow-ware, and ironmongery, £2,522; hatters' materials, £1,200; hose—canvas, indiarubber, &c., £3,231; indiarubber and gutta-percha goods, £6,528; iron and steel, £8,854; leather, £30,523; linen piece-goods, £6,617; machines and machinery, £43,074; manures, £19,420; manufactured metal, articles of, £9,634; millinery, £1,729; nuts, £1,369; oils, £4,882; onions, £1,162; paints and colours, £1,392; photographic goods, £3,270; plants, shrubs, &c., £5,702; plate and platedware, £1,250; portmanteaux, &c., £1,846; potatoes, £29,867; rice, £8,935; silks, £1,475; soap, £3,382; specie—silver, £1,500; spices, £1,012; spirits, £6,463; stationery, £11,075; sugar, refined, £8,721; tanning materials, £17,637; tea, £17,915; textile piece-goods, n.o.e., £4,129; timber, £5,556; tin, £8,160; tobacco, cigars, cigarettes, and snuff, £118,330; tools and implements, £4,861; wine, £10,723; woodenware, £1,143; woollen piece-goods, £1,438.

South Australia.—Manures, £6,661; salt, £18,635; tanning materials, £7,141; wine, £9,521.

Tasmania.—Fresh fruits, £13,404; fish, penguin, and seal oil, £1,144; potatoes, £1,418; provisions, n.o.e., £941; tanning materials, £2,587; timber, £30,865; tin, block, £2,147.

Western Australia.—Timber, £89,367.

Fiji.—Fresh fruits, £29,568; sugar, £546,522; molasses, £843.

Malden Island.—Manures, £14,658.

Ocean Island.—Manures, £8,585.

Christmas Island.—Manures, £10,477.

Seychelles.—Manures, £2,478.

Canada.—Apparel and slops, £7,528; bicycles, &c., and materials for, £1,796; boots and shoes, £6,648; canvas, £840; bodies for motor vehicles, £3,667; chassis for motor vehicles, £16,849; materials for carriages, &c., £2,413; cotton piece-goods, £2,005; drugs, chemicals, and druggists' wares, £3,302; fish, potted and preserved, £24,323; furniture, cabinetwork, and upholstery, £10,507; glass bottles, empty, £1,493; glassware, £6,248; hardware, hollow-ware, and ironmongery, £2,651; musical instruments, £1,998; iron and steel, £3,075; leather, £3,137; machinery and machines, £29,879; manufactured metal, articles of, £2,722; mouldings and panels, £1,148; nails, £14,715; printing paper, £69,033; resin, £1,228; seeds, £8,544; timber, £10,518; tools and implements, £1,962; wine, £1,975; woodenware, £5,623.

Cape Colony.—Wine, £6,430.

Hong Kong.—Furniture, &c., £858; grain and pulse, £1,462; jams, jellies and preserves, £4,477; rice, £3,771; textile piece-goods, £1,961.

Bengal.—Candles, £379; canes and rattans, £353; corn-sacks, £191,007; bags and sacks, n.o.e., £16,137; bagging and sacking, £1,618; fibrous yarns, £979; hatters' materials, £1,270; hessians and scrim, £24,800; kapok, £2,392; manures—bonedust, £43,904; mats and matting, £2,956; oils—castor, £15,591; linseed, £3,959; pig iron, £3,315; tea, £24,686; woolpacks, £56,140.

Burmah.—Candles, £5,578; paraffine wax, £2,481; rice, £2,607.

Ceylon.—Cocoa-beans, £1,741; coffee, raw, £453; desiccated cocoanut, £4,859; tea, £237,146.

Singapore.—Canes and rattans, £713; fruits, bottled and preserved, £10,308; kapok, £1,928; rice, £4,159; sago and tapioca, £14,027; spices, unground, £5,150.

PRINCIPAL IMPORTS FROM FOREIGN COUNTRIES.

United States of America.—Apparel and slops, £17,700; arms, ammunition, and explosives, £12,997; beekeepers' tools, £5,754; belting, other than leather, £3,258; bicycles and tricycles, £1,196; books, &c., printed, £8,691; boots and shoes, £16,771; brushes, brushware, and brooms, £3,139; candles, £1,110; canvas, £3,176; carriages, carts, &c., £4,196; bodies for motor vehicles, £3,910; chassis for motor vehicles, £19,851; materials for motor vehicles, £1,128; materials for carriages, &c., £10,579; clocks, £8,944; confectionery, £3,137; cordage, £1,018; cotton piece-goods, £17,207; drugs, chemicals, and druggists' wares, £26,162; dyes, £1,667; engine-packing, £2,164; fancy goods and toys, £13,381; fish, potted and preserved, £5,185; farinaceous foods, £5,276; fruits, bottled and preserved, £17,967; fruits, dried, £49,072; fruits, fresh, £17,827; furniture, cabinetwork, and upholstery, £5,822; furniture, knife, and plate powder and polish, £4,328; glass bottles, empty, £2,490; glassware, £7,028; grease, £2,927; grindery, £14,478; hardware, hollow-ware, and ironmongery, £54,976; hose—canvas, indiarubber, &c., £2,206; printing ink, £2,331; instruments—musical, harmoniums, and organs, £2,430; pianos, £1,121; other musical instruments, £1,298; scientific, £1,021; surgical and dental, £7,361; iron and steel, £80,322; lamps, lanterns, and lampwick, £9,192; leather, £29,067; machinery and machines, £156,956; marble, £1,353; manufactures of metal, £41,693; mouldings and panels, £5,329; nails, £20,728; fish, penguin, and seal oil, £1,153; kerosene, £180,661; other mineral oils, £90,568; oils, n.o.e., £17,499;

paints and colours. £11,119; paperhangings, £3,506; printing-paper, £7,281; writing-paper, £1,891; perfumery, £4,800; photographic goods, £4,322; pictures, paintings, drawings, &c., £1,797; plaster-of-paris, £2,031; plate and platedware, £1,898; provisions, n.o.e., £1,335; resin, £2,877; saddlery and harness, £2,368; sausage-skins, £15,707; seeds, grass and clover, £6,361; ship chandlery, n.o.e., £1,223; soap-powder, extract of soap, &c., £1,917; soap, n.o.e., £9,588; spirits, £1,847; stationery, £10,947; stones—grind, mill, oil, and whet, £1,683; sugar, glucose, £7,313; timber, £18,925; tobacco, cigars, cigarettes, and snuff, £88,436; tools and implements, £55,337; turpentine and terebene, £13,666; varnish, lacquers, and gold-size, £3,255; watches, £1,922; wax, paraffine, £21,414; wine, £1,336; woodenware, £18,825.

Germany.—Acid, £2,056; apparel and slops, £5,602; arms, ammunition, and explosives, £1,471; beer, £1,455; bicycles and tricycles, and materials for, £13,178; brushes, brushware, and brooms, £2,573; carriages—materials for motor vehicles, £4,852; china, porcelain, and parian ware, £8,742; clocks, £4,127; cocoa and chocolate, £1,319; confectionery, £1,590; cotton piece-goods, £4,057; drapery, £3,634; drugs, chemicals, and druggists' wares, £7,590; earthenware, £3,716; fancy goods and toys, £32,194; fish, potted and preserved, £1,155; furniture, cabinetware, and upholstery, £2,486; gelatine and isinglass, £1,072; glass bottles, empty, £9,858; glassware, £11,607; haberdashery, £1,602; hardware, hollow-ware, and ironmongery, £15,539; hosiery, £2,414; musical instruments, (pianos), £41,957; others, £4,159; iron and steel, £15,299; jewellery, £2,077; lamps, lanterns, and lampwick, £8,698; leather, £4,912; machinery and machines, £24,306; manures, £18,329; manufactures of metal, £5,108; moulding and panels, £3,804; nails, £2,492; nuts, £1,246; butter-paper, £3,385; paperhangings, £2,274; wrapping-paper, £4,570; writing-paper, £1,649; perfumery, £1,219; provisions, n.o.e., £1,942; salt, £3,114; seeds, grass and clover, £18,208; spirits, Geneva and gin, £3,082; stationery, £12,155; textile piece-goods, n.o.e., £5,212; tobacco, cigars, cigarettes, and snuff, £1,256; tobacco pipes and cases, £1,303; tools and implements, £2,308; wine, £1,401; woodenware, £956; zinc, £2,201.

Belgium.—Apparel and slops, £11,699; arms, ammunition, and explosives, £1,066; confectionery, £4,953; cotton piece-goods, £2,526; dyes, £779; glass—plate, £8,693; window, £15,546; glassware, £3,521; iron and steel, £2,581; machinery and machines, £6,689; manures, £4,506; matches, £1,046; manufactures of metal, £2,966; butter-paper, £2,915; paperhangings, £1,858; writing-paper, £1,205; slates, roofing, £1,033; stearine, £2,556; wine, £1,122; zinc, £7,845.

France.—Acid, tartaric, £2,594; bicycles and tricycles, £2,164; bodiès for motor vehicles, £1,433; chassis for motor vehicles, £9,542; materials for motor vehicles, £1,118; cork, cut, £1,064; cream of tartar, £32,733; earthenware, £11,250; fancy goods and toys, £5,447; gelatine and isinglass, £2,856; machinery and machines, £3,403; nuts, £1,403; perfumery, £2,451; silks, £2,063; spirits, £9,607; stearine, £3,919; textile piece-goods, £1,915; tobacco pipes and cases, £5,103; wine, £10,717.

Italy.—Asphalt, £927; almonds, £9,944; fruit, lemon and orange peel, in brine, £4,247; hats and caps, £3,310; marble, £5,417.

Japan.—Apparel and slops, £4,941; china, porcelain, and parian ware, £1,625; cotton piece-goods, £2,185; drapery, £8,207; earthenware, £829; fancy goods and toys, £3,987; furniture, cabinetware and upholstery, £2,430; grain and pulse, £867; haberdashery, £924; hats and caps, £884; manures, £17,397; mats and matting, £1,504; rice, £4,516; silks, £20,604; sulphur, £6,325.

Spain.—Cork, cut, £8,068; nuts, £2,775; wine, £1,596.

Portugal.—Cork, cut, £1,657; fish, potted and preserved, £846.

Norway.—Carbide of calcium, £7,052; fish, potted and preserved, £5,744.

Sweden.—Carbide of calcium, £4,073; lamps, lanterns, and lampwick, £736; machinery and machines, £20,936; matches, £3,047; timber, £3,611; wrapping-paper, £3,600; hardware, hollow-ware, and ironmongery, £846.

Denmark.—Machinery and machines, £3,489.

Austria-Hungary.—Furniture, cabinetware, and upholstery, £3,068; gelatine and isinglass, £1,057.

Holland.—Cocoa and chocolate, £28,523; cotton piece-goods, £1,532; seeds, £3,129; gin and Geneva, £11,390; materials for cardboard boxes, £2,436; zinc spelter, £1,258.

Switzerland.—Confectionery, £4,691.

Greece.—Dried fruits, £29,675.

Java.—Kopok, £17,648; raw sugar, £57,750.

Asia Minor.—Dried fruits, £37,262; tanning materials, £906.

West Indies.—Cigars, £3,083.

Arabia.—Dried fruits, £1,391.

China.—Rice, £1,339; tea, £1,174.

Turkey.—Dried fruits, £11,853; foods for animals, £1,724.

Friendly Islands.—Copra, £28,176; fresh fruits, £16,277.

Society Islands.—Copra, £2,476; fresh fruits, £5,825.

Surprise Island.—Manures (guano), £5,344.

Philippine Islands.—Hemp, £10,559; cigars, £1,950.

New Caledonia.—Manures, £4,007.

SUGAR.

The value of sugar (including raw sugar, £604,272; refined sugar, £10,359; glucose, £7,996; molasses and treacle, £911) imported in 1910 was £623,538, an increase of £9,588 on the amount for 1909 (£613,950). The value of this import for the last three years has averaged £610,112. The following figures, giving the average consumption per head of sugar in Australasia, are, saving those for New Zealand—and excluding a proportion (30 lb. per head) deducted on account of Maoris—taken from “The Official Year-book of New South Wales, 1904–5.” The figures stating the consumption of tea, wine, beer, spirits, and tobacco, given further on, are also taken from the same source:—

ANNUAL CONSUMPTION OF SUGAR PER HEAD IN AUSTRALASIA.

	lb.		lb.
Queensland	123·0	South Australia .. .	101·8
New South Wales	109·2	Victoria	100·7
New Zealand	107·9	Tasmania	100·4
Western Australia	107·6		

TEA.

The quantity of tea imported in 1910 was 7,586,816 lb. Supposing Maoris to use, on an average, 1 lb. per head per annum, the consumption of tea per head of the population exclusive of Maoris, would be about $7\frac{1}{2}$ lb.

AVERAGE ANNUAL CONSUMPTION OF TEA PER HEAD IN AUSTRALASIA.

	lb.		lb.
Western Australia	9·6	Queensland	7·0
South Australia	8·2	Victoria	6·9
New Zealand	7·5	Tasmania	6·2
New South Wales	7·2		

BEER, SPIRITS, AND WINE.

During 1910 excise duty was paid on 9,399,440 gallons of beer : whilst 271,594 gallons of beer, 769,446 gallons of spirits, and 153,435 gallons of wine were entered at the Customs for home consumption.

BEER MANUFACTURED IN NEW ZEALAND ON WHICH EXCISE DUTY WAS PAID.

Gal.				Gal.			
1901	..	..	7,134,800	1906	..	..	8,318,880
1902	..	..	7,179,360	1907	..	..	9,049,600
1903	..	..	7,555,200	1908	..	..	9,347,600
1904	..	..	7,786,480	1909	..	..	9,183,920
1905	..	..	7,796,160	1910	..	..	9,399,440

The following table gives the consumption per head of alcoholic liquors by the people, excluding and including Maoris, showing separately the proportions of beer, wine, and spirits from 1901 to 1910. To the quantity of beer manufactured in each year on which excise duty was paid has been added the quantity brought into consumption from imports :—

Year.			Beer.		Spirits.		Wine.	
			Excluding Maoris.	Including Maoris.	Excluding Maoris.	Including Maoris.	Excluding Maoris.	Including Maoris.
			Gal.	Gal.	Gal.	Gal.	Gal.	Gal.
1901	..	..	9-413	8-919	0-766	0-726	0-159	0-151
1902	..	..	9-252	8-777	0-755	0-716	0-158	0-150
1903	..	..	9-460	8-987	0-755	0-718	0-149	0-142
1904	..	..	9-455	8-996	0-766	0-729	0-142	0-135
1905	..	..	9-212	8-777	0-730	0-695	0-130	0-124
1906	..	..	9-569	9-085	0-773	0-734	0-143	0-136
1907	..	..	10-150	9-649	0-806	0-766	0-159	0-151
1908	..	..	10-179	9-689	0-795	0-757	0-158	0-150
1909	..	..	9-710	9-256	0-740	0-705	0-143	0-136
1910	..	..	9-741	9-294	0-773	0-737	0-154	0-147

A comparison of the consumption of beer, spirits, and wine per head in Australasia on an average of five years is added :—

—	Beer.	Spirits.	Wine.	—	Beer	Spirits.	Wine
	Gal.	Gal.	Gal.		Gal.	Gal.	Gal.
Queensland ..	10-4	1-10	0-28	Western Australia	24-50	1-47	1-00
New South Wales	9-8	0-83	0-68	Tasmania ..	9-22	0-54	0-17
Victoria ..	13-4	0-70	1-29	New Zealand (in-	9-39	0-74	0-14
South Australia ..	8-4	0-46	5-43	cluding Maoris)			

Besides showing the quantity of alcoholic liquor consumed during the year, it seems desirable to give some information as to the actual cost of the beer, wine, and spirits imported, not including duty, which is merely so-much taxation raised by means of the importer, but all held in the Dominion and used by the Government for the benefit of the people.

In the year 1910 the value of the various kinds of potable spirits imported amounted to £317,374, of imported beer to £53,086, and wines to £77,826; making altogether £448,286.

If to the above total be added £704,958, the estimated value of the beer manufactured, and £9,000, the estimated value of wine made, the cost for the introduction and manufacture of alcoholic beverages comes to £1,162,244 for the year 1910, against which may be set £7,582, representing the value of the small export for the same period.

TOBACCO.

The tobacco entered for consumption in 1910 was 2,800,005 lb., and the consumption per head of population, including Maoris, 2·69lb.

AVERAGE ANNUAL CONSUMPTION PER HEAD OF TOBACCO IN VARIOUS COUNTRIES,

	lb		lb.
Holland	6·92	Queensland	2·65
United States	4·40	Tasmania	2·30
Turkey	4·37	South Australia	2·14
Western Australia	4·36	Canada	2·11
Austria-Hungary	3·77	France	2·05
Denmark	3·70	Victoria	2·02
Switzerland	3·24	Sweden	1·87
Belgium	3·15	Spain	1·70
Germany	3·00	United Kingdom	1·41
New Zealand	2·69	Italy	1·34
New South Wales	2·69	Russia	1·23

DETAILS OF ALL ARTICLES OF IMPORT.

Details of all imports for 1910, giving quantities and values of articles introduced, with the amounts entered for home consumption, and the amount of duty received, are next shown :—

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910.

(For rates of duty, see Tariff.)

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
Acid—		£		£ s. d.
Acetic	554,710 lb.	5,015	540,518 lb.	3,378 4 9
Carbolic	31,591 "	426	..	..
Salicylic	3,095 "	217	..	..
Sulphuric	79,434 "	672	..	..
Tartaric	157,653 "	6,596	..	..
Unenumerated ..	383,603 "	8,023	..	..
Alkali—				
Potash and caustic pot-ash	1,498 cwt.	1,991	..	..
Soda ash	19,195 "	6,576	..	..
Soda, carbonate and bi-carbonate	18,896 "	7,075	..	..
Soda, caustic	18,230 "	14,013	..	..
Soda crystals	157 "	70	161 cwt.	16 3 0
Soda silicate	6,835 "	2,450	..	..
Unenumerated ..	4,231 "	2,816	..	..
Alum	3,985 "	1,610	..	..
Animals, living—				
Antelopes	2 No.	30	..	..
Bears	4 "	54	..	..
Bees	..	1	..	..
Birds	4,543 No.	782	..	..
Cats	7 "	35	..	..
Cattle	96 "	6,001	92 No.	46 0 0
Deer	9 "	45	..	..
Dogs	134 "	940	..	..
Horses	156 "	17,058	131 No.	131 0 0
Kangaroos	2 "	20	..	..
Leopards	2 "	50	..	..
Lions	2 "	300	..	..
Monkeys	49 "	82	..	..
Moose	10 "	500	..	..
Pheasants	67 "	34	..	..
Pigs	5 "	50	..	..
Poultry	240 "	354	..	..
Puma	1 "	20	..	..
Sheep	472 "	5,166	..	..
Squirrels	2 "	1	..	..
Tigers	1 "	50	..	..
Turtles	30 "	8	..	..
Wallabies	7 "	31	..	..
Apparel and slops n.o.e. ..	..	843,875	£837,881	209,470 2 10
Apparel made to order of residents in the Dominion ..	..	1,326	£1,285	514 2 6
Arms, ammunition, and explosives—				
Accoutrements	..	103	..	..
Caps, percussion	4,473,000 No.	585	481	48 2 0
Cartridges (shot), 10 to 24 bore	7,322,911 "	23,672	7,421,500 No.	9,164 15 8

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
Arms, ammunition, and explosives— <i>continued.</i>		£		£ s. d.
Cartridges n.o.e. ..	14,902,990 No.	8,039	£14,250	2,228 19 9
" ..	861,000 "	554		
Cartridge-cases ..	195,800 "	333	199,800 No.	122 13 9
Detonators for dynamite ..	..	3,328	..	..
Dynamite ..	261,250 lb.	11,254	..	..
Firearms ..	11,920 No.	13,883	£21,761	3,510 15 7
Fuse ..	354,480 coils	7,205	..	..
Lithofracteur, cordite, and similar explosives ..	320,989 lb.	15,654	..	..
Ordinance stores ..	..	8,591	..	..
Powder, blasting ..	677,000 lb.	17,525	..	..
" sporting ..	13,506 "	1,266	..	..
Shot ..	251 cwt.	291	256 cwt.	126 17 1
Other explosives ..	583,689 lb.	24,502	..	..
Unenumerated ..	..	197	..	..
Asphalt.. ..	27,333 cwt.	3,558	..	..
Bacon and hams ..	1,806 lb.	81	1,462 lb.	12 3 9
Bags and sacks—				
Cornsacks ..	754,826 doz.	193,969	..	..
Unenumerated ..	115,541 "	17,794	£360	55 18 0
Bags of textile or felt, printed ..	..	..	£58	10 17 6
Bagging and sacking ..	..	2,219	£2	0 8 0
Basketware and wickerware ..	..	5,241	£9,491	1,480 9 9
Beekeepers' tools ..	..	6,011	..	..
Beer ..	274,276 gal.	53,086	271,594 gal.	27,159 7 2
Belting, leather ..	39,451 lb.	5,919	38,644 lb.	644 1 6
" part leather ..	380 lb.	44	380 lb.	3 3 4
" other than leather ..	..	31,814	£4,224	422 8 0
Beverages, non-alcoholic—				
Aerated and mineral waters ..	..	4,053	£4,056	811 2 3
Coffee-essence ..	..	14,120	£13,382	2,676 8 2
Fruit-juices, sweetened ..	..	1,188	£1,134	223 16 0
" unsweetened ..	1,645 gal.	249	..	..
" ..	28,686	2,718	£226	45 4 0
Unenumerated ..	..	564	£637	123 16 0
Bicycles and tricycles ..	9,157 No.	31,139	£32,166	6,341 4 6
Materials for ..	..	176,899	£38,528	7,509 7 8
Motor bicycles and tricycles ..	486 No.	8,129	£8,754	1,711 0 0
Materials for ..	..	5,592	£882	174 14 0
Biscuits—				
Fancy, and other kinds ..	113,939 lb.	5,624	115,657 lb.	951 15 5
Ships', plain ..	240 cwt.	276	241 cwt.	36 4 2
Blacking ..	..	28,327	£28,422	5,662 8 0
Blacklead ..	..	6,435	£6,884	1,340 9 3
Blue ..	362,615 lb.	8,734	357,819 lb.	1,487 9 7
Boats ..	56 No.	1,249	£1,470	271 14 0
Books, &c., printed ..	..	213,328	..	..
Boots and shoes ..	103,013 doz. pr.	250,456	£245,154	71,987 11 1
Gum-boots ..	1,258 doz. pr.	10,871	..	..

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
		£		£ s. d.
Borax	4,867 cwt.	5,573	..	..
Bran	4 tons	15	..	..
Brass—				
Pigs, bar, or sheet ..	1,414 cwt.	5,052	..	..
Tubing or stamped work in the rough ..	472 "	1,949	..	..
Bricks—				
Building	7,240 No.	46	..	..
Fire	164,842 "	901	£952	185 6 0
Other kinds	42,382 "	243	..	..
Bronze, ingots	160 cwt.	973	..	..
Brushes, brushware and brooms	..	40,718	£52,867	11,677 0 5
Materials for	..	11,464	..	..
Butter	1 cwt.	2	..	..
Candles	2,336,410 lb.	37,960	2,341,762 lb.	14,356 6 11
Canes and rattans ..	..	1,747	..	..
Canvas	..	59,806	..	..
Caramel	44,784 lb.	610	44,560 lb.	185 13 4
Cards, playing	109,702 packs	1,757	83,142 packs	2,078 11 0
Carpeting and druggeting ..	..	73,473	£72,128	14,425 12 11
Carriages, &c.—				
Carriages	142 No.	3,493	£4,140	746 0 0
Carts, drays, and wagons ..	91 "	1,251	£2,241	349 6 0
Motor vehicles—bodies for	726 "	41,250	£41,221	8,244 2 3
Motor vehicles—chassis for	772	180,065	..	..
Motor vehicles—materials for	..	57,979	£1,368	273 13 3
Perambulators and go-carts	4,029 No.	3,717	£8,585	1,505 7 0
Steam motor lorries—bodies for	1 "	100	..	..
Steam motor lorries—chassis for	1 "	450	..	..
Materials for	..	12,473	£13,738	2,614 5 6
Materials for—viz., axles, axle-arms and boxes ..	..	17,842	..	..
Carriage and cart shafts, spokes, and felloes in the rough	..	7,649	..	..
Carriage and cart makers' materials	..	31,377	..	..
Cement	131,701 barrels	52,496	130,945 barrels	13,094 18 2
Chains and chain cables ..	12,711 cwt.	13,916	£578	57 16 7
Charcoal	173 tons	1,390	..	..
Cheese	10 cwt.	40	£42	7 4 0
Chicory	126 lb.	8	126 lb.	1 11 6
China, porcelain, and parian ware	..	40,990	£53,965	9,477 8 0

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including preferential.
		£		£ s. d.
Clocks	77,169 No.	18,747	£35,810	5,451 13 4
Coals	232,378 tons	230,765		
Cocoa and chocolate	567,057 lb.	58,296	882,128 lb.	7,830 10 9
Cocoa-beans	375,444 "	10,669	..	..
Cocoa-butter	298,112 "	10,482	..	..
Cocoanut, desiccated	319,893 "	6,238	..	..
Coffee—				
Raw	281,183 "	9,175	..	..
Roasted	1,540 "	93	1,709 lb.	20 16 3
Coke	2,714 tons	4,926		
Combs	..	6,539	£9,402	1,587 3 7
Confectionery—				
Chocolate confectionery, plain trade packages ..	141,353 lb.	6,795	155,523 lb.	1,798 10 9
Chocolate confectionery, fancy packages ..	..	42,453	£57,003	9,044 10 7
Unenumerated	863,071 lb.	29,656	1,008,813 lb.	7,403 2 10
Copper—				
Nails	330 cwt.	1,634	..	..
Pig, bar, and sheet	6,506 "	24,681	..	..
Rod and bolt	233 "	956	..	..
Sheathing	230 "	824	..	..
Copra	1,635 tons	32,847	..	..
Cordage	5,414 cwt.	18,129	£18,926	3,644 18 1
Hawsers of 12 in. and over ..	474 "	556	..	..
Iron and steel	14,100 "	30,081	£237	47 8 0
Cork, cut	..	16,322	£14,820	1,482 0 9
Cotton piece-goods—				
Butter and cheese cloth	..	10,204	£3,703	740 12 0
Leather cloth	..	9,540	..	..
Tubular woven cotton cloth	..	40,462	..	..
Waterproof material	..	6,137	..	..
Unenumerated	..	804,471	..	..
Cotton—				
Waste	5,653 cwt.	8,304	..	..
Wick	132,239 lb.	6,669	..	..
Drapery	..	388,275	£386,624	77,324 16 7
Lace and laces n.o.e.	..	60,385	£59,138	11,827 10 11
Ribbons and crape	..	55,598	£55,153	11,030 12 7
Tailors' trimmings	..	65,270	..	..
Drugs, chemicals, and druggists' wares—				
Baking-powder, yeast preparations, &c.	..	1,111	£1,198	234 18 0
Chemicals n.o.e.	..	9,238	£10,520	1,948 8 4
Cream of tartar	1,170,637 lb.	37,617	..	..
Medicinal preparations, drugs, and druggists' sundries	..	150,950	£187,632	33,863 15 7
Glycerine, refined	..	3,689	£3,641	728 2 0

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
Drugs, chemicals, and druggists' wares— <i>continued.</i>		£		£ s. d.
Medicinal preparations over 50 per cent. proof spirits	40,101 lb.	5,937	43,513 lb.	2,175 13 3
Washing-powder	..	2,525	£2,608	521 13 5
Anhydrous ammonia	..	3,882	..	..
Arsenic	1,618 cwt.	1,276	..	..
Carbide of calcium	1,693 tons	20,708	..	..
Disinfectants	..	14,936	..	..
Gums	..	4,026	..	..
Insecticides and tree-washes	..	5,538	..	..
Medicinal barks, leaves, &c.	..	886	..	..
Phosphorus	..	1,240	..	..
Potassium and sodium cyanide	606 tons	52,452	..	..
Sheep-dip	..	51,228	..	..
Sheep and horse drenches and sheep-licks	..	1,064	..	..
Vanilla beans	17,911 lb.	2,091	..	..
Unenumerated	..	45,510	..	..
Dyes	..	16,425	..	..
Earthenware	..	102,478	£95,464	18,332 6 2
Eggs for setting	20 doz.	25	..	..
Engine-packing	..	18,417	..	..
Essences—				
Flavouring, spirituous	4,350 gal.	10,645	4,374 gal.	3,499 10 8
Flavouring n.o.e.	..	294	£306	58 12 0
Essential oils—				
Eucalyptus	12,264 lb.	2,333	£2,358	471 12 0
Other kinds	..	7,730	..	..
Fancy goods and toys	..	234,118	£334,579	55,889 18 6
Felt sheathing	..	5,719	£517	51 14 0
Fire engines and extinguishers	859 No.	3,319	£45	4 10 0
Fire hose and other appliances	..	253	£3	0 6 0
Fireworks	..	2,018	£3,162	513 16 0
Fish—				
Anchovies, salted	9 cwt.	26	..	..
Dried, pickled, or salted	2,073 ..	3,851	2,382 cwt.	1,109 16 9
Potted and preserved	2,400,856 lb.	64,758	2,467,206 lb.	19,954 6 2
Fishing-tackle—				
Artificial flies	..	262	£260	65 0 0
Fish-hooks	..	677	..	..
Unenumerated	..	4,632	£4,720	928 8 3
Flock	20 cwt.	25	£25	2 10 0
Floorecloth and oilcloth	..	125,255	£123,088	24,617 11 5
Flour	61,560 centals	26,885	60,681 centals	3,034 1 3

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—continued.

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
Foods, animal—		£		£ s. d.
Chaff	3,788 tons	13,497	3,784 tons	3,784 7 3
Prepared calf-meal	6 "	60	6 "	7 10 0
Unenumerated	..	6,392	£10,347 "	1,666 5 10
Foods, farinaceous—				
Arrowroot	161,132 lb.	2,332	..	..
Infants and invalids	..	19,248	..	..
Macaroni and vermicelli	312,444 lb.	4,092	..	..
Maizena and cornflour	1,807,625 "	22,223	..	..
Sago and tapioca	21,356 cwt.	15,673	..	..
Unenumerated	..	2,456	..	..
Fruits, bottled and preserved	151,348 doz.	32,480	£50,646	10,425 15 8
Fruits, dried—				
Currants	2,856,753 lb.	32,597	..	..
Raisins	4,622,078 "	63,292	..	..
Figs, dates, and prunes	3,983,935 "	41,204	..	..
Unenumerated	721,931 "	14,480	726,104 lb.	6,050 17 4
Fruits, fresh—				
Apples, pears, plums, &c.	411,223 "	7,271	411,053 lb.	1,712 14 5
Apples and pears	2,753,764 "	30,480	2,752,842 "	5,735 1 9
Grapes	121,512 "	2,314	121,512 "	506 6 0
Lemons	825,268 "	9,997	825,268 "	1,719 6 2
Other kinds	13,920,440 "	99,358	..	..
Fruits, lemon and orange peel, in brine	915,523 "	5,481	..	..
Fruit-pulp, and partially preserved fruit	87,974 "	1,327	87,975 lb.	549 16 11
Fungus	22 cwt.	48	..	..
Furniture, cabinetware, and upholstery	..	43,595	£59,362	12,782 7 2
Kapok	8,900 cwt.	23,001	..	..
Unenumerated	..	7,875	..	..
Furniture, knife, and plate powder and polish	..	10,687	£15,792	2,660 15 1
Furs	..	13,422	£12,914	3,228 10 9
Gelatine and isinglass	244,389 lb.	11,429	422,804 lb.	1,747 14 9
Glass—				
Bottles, empty	..	54,082	..	..
Mirrors and looking-glasses	..	8,232	£9,851	2,251 11 0
Plate, bevelled, &c.	..	6,666	£8,166	1,841 13 7
" other kinds	1,055,570 sup. ft.	28,565	..	..
Window	4,682,848 "	36,652	..	..
Glassware	..	50,400	£56,106	8,790 8 7
Glue and size	161,108 lb.	3,682	229,037 lb.	1,084 18 7
Gold-leaf	..	189	..	..
Grain and pulse—				
Barley	207 centals	140	204 centals	20 3 6
Beans and peas	659 "	496	464 "	17 7 9
Oats	2,102 "	653	958 "	35 13 8
Wheat	1,877 "	642	1,876 "	70 7 0
Unenumerated	16,828 "	9,106	14,490 "	543 7 2
Ground n.o.e.	12,125 "	8,441	12,766 "	584 17 2
Grease	6,681 cwt.	5,631	£9,514	1,497 14 2

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
Grindery—		£		£ s. d.
Heel and toe plates	..	717	£717	161 6 6
Unenumerated	..	50,066	£11	1 2 0
Gum, kauri	8 tons.	829	..	..
Haberdashery	..	22,196	£22,181	4,436 0 0
Buttons, &c.	..	38,785	..	..
Sewing cottons, silks, and threads	..	74,229	..	..
Unenumerated	..	1,767	..	..
Hair	..	3,290	..	..
Hardware, hollow-ware, and ironmongery	..	417,402	£489,963	89,244 14 11
Hats and caps	79,801 doz.	95,788	£96,133	24,033 2 9
Hatters' materials	..	32,787	..	..
Hemp	511 tons	11,909	..	..
Hides	4,519 No.	4,737	..	..
Honey	322 lb.	6	322 lb.	2 13 8
Hop	38,771 "	1,572	22,699 "	478 16 9
Hose, canvas, indiarubber, &c.	..	23,209	£3,108	621 11 3
Hosiery	..	163,861	£164,206	41,051 11 6
Indiarubber and gutta-percha goods	..	13,639	£336	67 4 0
Ink—				
Printing	131,383 lb.	8,333	£2,735	273 10 0
Writing	7,714 gal.	3,095	7,496 gal.	734 6 6
Instruments, musical—				
Harmoniums and organs	473 No.	5,530	£8,783	1,428 16 0
Pianos	4,468 "	110,853	£157,633	26,674 11 2
Unenumerated	..	14,521	£22,716	3,727 6 6
For Volunteer bands	..	244	..	..
Materials for	..	2,266	£577	102 12 0
Instruments—				
Optical	..	3,502	..	..
Scientific	..	7,459	..	..
Surgical and dental	..	27,425	..	..
Surveying	..	2,355	£332	33 4 0
Unenumerated	..	28	..	..
Iron and steel—				
Angle	1,368 tons	9,716	£7	1 8 0
Bar, bolt, and rod	20,297 "	161,099	£891	178 4 0
Bolts and nuts	29,896 cwt.	30,690	..	..
Castings for ships	..	1,205	£49	9 16 0
Galvanized manufactures	..	766	£707	171 8 7
Hoop	2,503 tons	22,117	730	146 0 0
Hoop, galvanized	3,837 cwt.	2,273	6,029 cwt.	320 14 7
Pig	10,107 tons	£42,033	..	..
Pipes and fittings	19,889 "	204,241	£11,602	2,320 6 7
Rails	21,322 "	141,274	£438	87 12 0
Sheet and plate	7,147 "	60,249	£933	186 12 0
Sheet, galvanized, corrugated	355,803 cwt.	274,192	353,679 cwt.	35,266 8 11

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
Iron and steel—<i>continued.</i>		£		£ s. d.
Sheet, galvanized, plain	67,045 cwt.	53,144	68,458 cwt.	5,029 10 6
Staples, fencing ..	20,212 "	12,608	..	..
Tanks ..	4,811 No.	13,055	1,651,070 gal.	2,055 4 9
Wire, fencing, barbed ..	4,861 tons	60,988	..	..
Wire, fencing, plain ..	11,819 "	118,150	..	..
Wire, telegraphic and telephone	150 "	5,858	..	..
Wire netting ..	..	51,852	£16	1 12 0
Wire n.o.e. ..	275 tons	3,590	..	..
Unenumerated ..	310 "	1,893	..	..
Jams, jellies, and preserves	665,452 lb.	11,987	703,838 lb.	5,568 18 10
Jellies, concentrated ..	78,788 "	3,153	78,658 "	1,310 19 2
Jewellery ..	..	10,609	£12,075	2,170 8 3
Lamps, lanterns, and lamp-wick	..	47,879	£72,570	11,867 0 5
Lamps ..	..	913	..	..
Lard ..	39 cwt.	131	£131	26 4 0
Lead—				
Pigs and bars ..	1,306 tons	18,689	..	..
Pipe (including composition) ..	273 cwt.	301	286 cwt.	48 6 4
Sheet ..	20,281 "	17,257	..	..
Leather ..	944,494 lb.	155,002	648,650 lb.	4,544 18 7
Chamois ..	..	1,267	£1,356	250 14 0
Leather manufactures—				
Boot and shoe vamps, uppers, and laces ..	..	9,940	£11,257	2,390 0 8
Unenumerated ..	..	6,909	£8,336	1,617 18 5
Linen piece-goods ..	..	75,780	..	..
Hessians and scrim ..	..	61,008	..	..
Linseed ..	..	1	..	..
Machinery and machines—				
Agricultural (including agricultural implements)	..	123,279	..	..
Ploughs and harrows ..	..	8,801	..	..
Cash registering ..	390 No.	6,163	£4,371	874 4 0
Dairying ..	..	68,286	£3,697	369 14 0
" engines for ..	..	1,731	£2,849	147 4 0
" boilers for ..	..	256	£481	73 14 0
Dredging ..	..	10,949	£11,451	600 13 6
Electric ..	..	207,565	£150,148	18,183 8 5
Engines, steam ..	50 No.	11,735	£9,819	1,937 15 0
" gas and oil ..	2,401 "	99,978	£19,662	3,932 6 4
" gas and oil, for motor-cars ..	132 "	3,006	£167	33 8 0
" boilers for ..	32 "	7,361	£7,705	1,512 18 0
Flour-milling ..	..	2,602	£2,578	128 18 0
Knitting ..	139 No.	4,658	..	..
Locomotives ..	3 "	1,649	£1,649	329 16 0
Mining ..	..	32,275	£7,179	717 19 0

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received including Preferential.
Machinery and machines— <i>continued.</i>		£		£ s. d.
Mining, engines for	..	5,807	£6,294	339 1 0
" boilers for	..	779	£779	155 16 0
Paper-milling	..	210	..	..
Portable and traction en- gines	61 No.	28,783	£1,750	175 0 0
Printing	..	29,860	£34,835	2,011 7 9
Refrigerating	..	3,558	£4,458	257 18 0
Sewing	11,718 No.	52,410	..	..
Woollen-mill	..	5,459	£4,443	223 10 0
Unenumerated	..	102,814	£117,994	19,501 14 4
Materials for, and parts of	..	19,141	£7,334	1,398 14 3
Maize, flaked	1,746 bush.	373	1,747 bush.	87 7 0
Malt	1,114 "	339	1,114 "	111 8 9
Rice-malt	4,720 lb.	45	4,720 lb.	19 13 4
Manures—				
Bonedust	11,315 tons	62,612	..	..
Guano	10,941 "	£28,533	..	..
Unenumerated	52,980 "	182,238	..	..
Marble—				
Dressed or polished	..	8,510	£8,584	2,146 1 8
Hewn or rough-sawn	443 tons	3,590	..	..
Matches and vestas (boxes)	209,679 gross	£27,205	252,882 gross	11,802 7 9
Mats and matting	..	12,620	£12,622	2,524 6 5
Meats, potted and preserved	..	1,754	£1,836	356 3 6
Metal, manufactured articles of—				
Anchors	1,189 No.	697	£239	23 18 0
Gasmaking plant	..	1,400	..	..
Japanned and lacquered metalware	..	781	£784	190 12 6
Meters — gas, water, or electricity	..	29,626	..	..
Pumps	..	2,811	£5,140	826 11 0
Railway and tramway plant	..	59,379	£2,779	555 16 0
Rivets and washers	12,479 cwt.	11,536	..	..
Tacks	2,541 "	3,809	..	..
Typewriters	1,366 No.	19,354	..	..
Unenumerated	..	210,346	£163,100	29,184 7 11
Metal sheathing, other than copper	1,461 cwt.	4,792	..	..
Milk, preserved	287,244 lb.	5,230	£4,456	1,013 5 6
Millinery—				
Feathers, ornamental	..	7,262	£7,311	1,826 17 10
Other kinds	..	72,036	£71,745	17,936 2 7
Mineral ore	..	2	..	..
Mouldings and panels	..	17,072	£17,113	3,422 11 6
Mustard	245,432 lb.	13,494	..	..
Nails	118,231 cwt.	67,246	153,671 cwt.	13,140 1 11
Roofing, lead-headed	321 "	460	£421 "	84 4 1
Nails	1,862 "	2,526	..	..

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
		£		£ s. d.
Naphtha (wood)	12,453 gal.	£1,907	..	..
Nuts—				
Almonds, shelled and unshelled	437,388 lb.	21,295	..	..
Cocoa	4,196 No.	25	..	..
Walnuts	64,227 lb.	2,635	64,227 lb.	535 4 6
Unenumerated	136,969 "	2,911	..	..
Oakum	372 cwt.	430	..	..
Oars	1,020 No.	186	..	..
Oils—				
Castor	125,531 gal.	16,026	..	..
Cod-liver	7,540 "	1,288	..	..
Colza	16,144 "	1,839	..	..
Fish, penguin, and seal ..	58,252 "	4,079	..	..
Linseed	372,710 "	61,128	..	..
Mineral, kerosene	5,459,159 "	181,362	..	..
" other kinds	2,430,064 "	105,955	886,229 gal.	10,851 10 0
Olive	6,291 "	1,713	..	..
Unenumerated, bulk ..	290,575 "	21,019	447,530 gal.	7,685 10 5
Unenumerated, in vessels under 1 gallon	..	10,361	£9,848	1,969 10 3
Unenumerated	78,118 gal.	9,972	..	..
Oilmen's stores	..	14,686	£14,367	2,873 7 6
Onions	2,224 tons	12,261	2,206 tons	2,205 18 5
Opium	368 lb.	290	32 lb.	64 0 0
Paints and colours—				
Ground in oil	64,752 cwt.	71,845	64,700 cwt.	8,011 4 9
Mixed ready for use ..	13,359 "	32,691	15,459 "	3,225 1 9
Unenumerated	16,354 "	16,290	£3,252	325 4 4
Driers, liquid	490 gal.	113	..	..
" n.o.e.	1,310 cwt.	1,175	1,322 cwt.	164 9 7
Paper—				
Bags, coarse	52 "	54	52 "	19 7 11
Bags, other kinds	7,171 "	8,416	£9,354	2,233 8 0
Butter-paper	7,896 "	11,022	..	..
Paperhangings	..	47,777	..	..
Printing	218,249 cwt.	171,062	£2,547	509 8 0
Wrapping	17,893 "	17,842	30,563 cwt.	6,055 15 9
Writing	31,276 "	46,708	..	..
N.o.e.	1,126 "	2,703	..	..
Pearl barley	830 "	461	830 cwt.	41 10 0
Peas, split	1,544 "	876	1,576 "	157 11 6
Peel, candied and drained	12,756 lb.	268	14,885 lb.	150 2 8
Perfumery—				
Perfumed spirits	1,879 gal.	7,498	1,826 gal.	2,739 3 0
Toilet preparations	..	22,595	£31,255	6,723 13 10
Unenumerated	..	999	£1,589	323 7 6
Photographic goods	..	5,952	£7,957	1,376 9 7
Copper, glass, and zinc plates for photo-lithographic work	..	1,264	..	..

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued*.

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
Photographic goods— <i>contd.</i>		£		£ s. d.
Photographic cameras				
and lenses	..	8,000	£2,363	236 5 8
Sensitized surfaces	..	22,382	£3,276	327 11 0
Pickles	3,899 gal.	1,188	4,147 gal.	622 1 9
Pictures, paintings, drawings, engravings, and photographs	..	8,369	£8,211	1,642 3 6
Family portraits	..	5	..	..
Paintings, &c., for museums, &c.	..	170	..	..
Paintings and pictures by New Zealand students	..	215	..	..
Picture frames and mounts	..	4,461	£5,984	1,043 12 6
Pitch	11,436 cwt.	3,362	..	..
Plants, shrubs, &c.	..	10,643	..	..
Plaster-of-paris	21,791 cwt.	4,768	..	..
Plate and platedware	..	84,175	£90,121	17,565 6 8
Portmanteaux and travelling-bags	..	7,041	£7,798	1,855 4 3
Leather bags and leather-cloth bags	..	1,672	£2,950	464 16 0
Potatoes	5,109 tons	33,563	£5,099	5,099 7 7
Printing materials—				
Stereotypes, matrices, half-tone, and line blocks	..	750	£750	187 10 6
Type and materials n.o.e.	..	13,234	£2,255	225 10 6
Provisions—				
Eggs	1,256 doz.	20	£99	5 18 0
Unenumerated	..	18,680	£24,670	4,322 3 2
Putty	5,340 cwt.	2,652	5,556 cwt.	672 7 11
Quicksilver	8,410 lb.	1,000	..	..
Resin	16,186 cwt.	10,720	..	..
Rice	76,145 "	43,101	..	..
Rice-meal refuse	8,816 "	1,619	..	..
Rugs	..	19,784	£19,550	3,910 0 5
Saccharine	27,016 oz.	484	23,172 oz.	1,737 18 0
Saddlery and harness (including whips)	..	31,543	£32,392	6,351 6 3
Harness oil, composition, and leather-dressing	..	2,370	£3,076	541 16 0
Saddlers' ironmongery and materials	..	22,726	..	..
Collar-check	..	8,100	..	..
Salt	22,053 tons	56,646	..	..
Rock salt	588 "	1,417	..	..
Saltpetre	2,187 cwt.	2,714	..	..
Sauces, catsup, and chutney	18,034 gal.	12,993	16,999 gal.	3,399 13 5
Soy	4,770 "	324	..	..

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continue d.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
		£		£ s. d.
Sausage-skins	277,364 lb.	19,469	272,188 lb.	3,402 7 0
Seeds—				
Grass and clover	21,840 cwt.	65,099	..	..
Unenumerated	..	35,011	..	..
Shale	274 tons	658	..	..
Ship-chandlery n.o.e. ..	..	5,245	..	..
Silks, &c.	..	59,437	£59,030	11,806 1 3
For flour-dressing	..	12	..	..
Silver	1,365 oz.	150	..	..
Skins and pelts	32,084 No.	1,705	..	..
Slates, roofing	456,581 "	4,653	..	..
Soap—				
Common	65 cwt.	60	67 cwt.	16 8 2
Powder, extract of soap, &c. ..	..	14,279	£14,229	2,845 14 5
Unenumerated	..	56,141	£67,055	15,337 19 8
Specie—				
Copper	..	3,954	..	..
Gold	..	295,300	..	..
Silver	..	4,106	..	..
Specimens illustrative of natural science	..	150	..	..
Spices—				
Ground	32,826 lb.	1,049	34,331 lb.	276 3 3
Unground	452,967 "	11,063	..	..
Spirits—				
Bitters, cordials, and liqueurs	3,849 gal.	3,721	3,819 gal.	3,055 10 0
Brandy	74,868 "	36,394	67,277 "	53,821 11 7
Geneva and gin, un-sweetened	114,069 "	29,728	91,392 "	73,113 6 3
Methylated	44 "	8	58 "	2 11 4
Rum	15,058 "	3,498	16,990 "	13,591 15 1
Sweetened, &c.	8,919 "	2,498	7,840 "	6,271 14 10
Whisky	646,578 "	237,017	568,365 "	454,692 7 7
Unenumerated	4,612 "	4,518	4,674 "	3,739 7 0
Spirits of wine	101,131 "	7,865	2,889 "	2,310 19 7
Methylated, in bond	..	..	93,097 "	2,327 8 5
Starch	1,198,267 lb.	12,934	1,167,287 lb.	9,620 7 2
Confectioners' moulding	33,004 "	216	..	..
Stationery—				
Handbills, circulars, &c. ..	353,741 lb.	14,460	394,994 lb.	4,531 4 7
Manufactured	..	66,739	£75,637	17,231 19 5
Unenumerated	..	58,786	£63,918	11,477 0 9
Apparatus and appliance for teaching purposes	..	8,832	..	..
Bookbinders' materials	..	8,032	..	..
Cardboard boxes, materials for	..	23,294	£1,145	229 0 0
Unenumerated	..	9,245	£1,129	112 17 9
Stearine	405,220 lb.	8,013	781,032 lb.	1,501 3 10
Stone	2,146 tons	3,324	..	..
Granite and other stone, dressed or polished, &c. ..	..	5,963	£6,024	1,499 11 3

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
Stone— <i>continued.</i>		£		£ s. d.
Granite and other stone, hewn or rough sawn, &c.	228 tons	903	..	..
Grind, mill, oil, and whet	..	3,737	..	..
Sugar—				
Raw	1,019,480 cwt.	604,272	..	..
Refined	11,650 "	10,359	..	..
Glucose	13,323 "	7,996	1,438,965 lb.	5,995 13 9
Golden syrup	12 "	28	..	..
Molasses	11,341 "	869	..	..
Treacle	11 "	14	..	..
Sulphur	31,983 "	7,829	..	..
Tanning materials, crude—				
Bark	2,960 tons	30,043	..	..
Other kinds	..	3,055	..	..
Tar	..	1,176	..	..
Tarpaulins and tents	..	2,244	£129	24 8 0
Tea	7,586,816 lb.	293,955	91,247 lb.	636 4 7
Textile piece-goods other than silk, cotton, linen, or woollen	..	356,293	£347,023	69,404 11 3
Articles made up from, other than apparel	..	24,996	£24,550	4,909 18 3
Timber—				
Laths and shingles	3,810,875 No.	4,442	3,810,875 No.	381 1 11
Logs	4,369 "	18,221	..	..
Logs, hewn	7,751,145 sup. ft.	80,662	..	..
Palings	696,859 No.	4,514	696,859 No.	696 17 1
Posts	50,219 "	2,438	50,219 "	200 18 8
Rails	5,276 "	160	5,276 "	10 11 2
Sawn, undressed	17,492,515 sup. ft.	141,637	15,093,533 sup. ft.	15,093 10 9
Sawn, dressed	275,595 "	4,920	275,600 "	551 4 1
Unenumerated	..	1,082	..	..
Tin—				
Block	3,641 cwt.	28,876	..	..
Foil	27,524 lb.	1,923	..	..
Sheet	66,928 cwt.	57,632	..	..
Tinware	..	15,670	£17,825	4,193 8 2
Tinsmiths' furniture and fittings	..	3,625	..	..
Tobacco—				
Unmanufactured	18,771 lb.	1,113	£17,458	1,745 16 0
Manufactured	2,404,721 lb.	269,847	2,276,679 lb.	398,418 17 3
Manufactured, British				
South African	2,824 lb.	323	2,020 lb.	252 11 3
Cigars	44,029 "	19,510	58,268 "	20,393 13 4
Cigarettes	50,183 "	156,440	{ 172,112 thous. }	155,445 6 5
Snuff	1,350 "	174	1,451 "	507 17 0
Tobacco pipes and cases	..	25,701	£40,660	6,545 19 2
Tools and implements—				
Axes and hatchets	..	4,576	..	..

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
		£		£ s. d.
Tools and implements— <i>ctd.</i>				
Engineers', metal, wood, and stone-workers' machine tools	..	43,138	..	..
Scythes	..	1,138	..	..
Sheep-shears	..	2,880	..	..
Spades, shovels, and forks	..	10,844	..	..
Unenumerated	..	105,454	..	..
Turpentine and terebene	113,971 gal.	19,101	..	..
Twine	..	27,121	£26,044	5,119 2 10
Nets and netting	..	1,351	£1,341	266 1 4
Binder	907 cwt.	2,565	..	..
Unenumerated	..	813	..	..
Umbrellas and parasols	..	9,759	£9,830	1,965 18 10
Materials for	..	..	£16,145	..
Varnish, lacquers and gold-size	49,315 gal.	22,156	54,157 gal.	4,792 11 8
Vegetables, fresh, dried, or preserved	..	2,096	£2,861	469 9 9
Vinegar	55,246 "	7,553	56,198 gal.	1,401 19 11
Watches	45,247 No.	10,464	£9,799	1,959 14 10
Watchmakers' materials	..	735	..	..
Wax—				
Beeswax	25,724 lb.	1,521	25,725 lb.	107 3 9
Paraffine	2,905,686 "	29,340	2,895,656 "	12,065 4 8
Unenumerated	116,042 "	2,351	71,202 "	296 13 6
Whiting and chalk	10,868 cwt.	1,422	13,044 cwt.	649 11 5
Wine—				
Australian	58,575 gal.	21,635	59,127 gal.	14,781 12 8
Sparkling	13,482 "	24,409	12,767 "	5,744 19 3
Sparkling, British South Africa	1 "	2	1 "	0 6 8
Other kinds	62,353 "	25,141	61,032 "	18,309 11 10
Other kinds, British South Africa	23,320 "	6,639	20,503 "	2,050 7 0
Woodenware	..	44,410	£41,470	6,850 3 9
Wool—				
Greasy	193,990 lb.	7,898	..	..
Scoured	16,555 "	992	..	..
Slips	16,789 "	1,270	..	..
Washed	93 "	4	..	..
Woollen piece goods	..	213,919	£215,006	43,001 6 1
Woollen blankets	6,064 pairs	2,385	£2,418	483 11 2
Woolpacks	54,855 doz.	57,424	..	..
Woolpockets	333 "	204	..	..
Yarns	..	10,427	£10,430	2,086 0 0
Coir, flax, jute, and hemp	..	3,258	..	..

GENERAL IMPORTS INTO NEW ZEALAND DURING 1910—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received, including Preferential.
Zinc—		£		£ s. d.
Perforated sheet ..	1,011 cwt.	1,948	£370	37 0 0
Plain sheet ..	6,047 "	8,703	..	..
Spelter ..	7,320 "	9,116	..	..
Minor articles required in the making-up of apparel, &c. ..	..	6,910	..	..
Articles and materials suited only for and to be used solely in the fabrication or repairs of goods within the Dominion ..	..	30,541	..	..
Miscellaneous goods—				
Manufactured ..	..	39,366	..	..
Unmanufactured ..	..	13,549	..	..
Parcels-post ..	..	307,299	..	60,177 10 2
EXCISE DUTIES.				
Tobacco, manufactured ..	..	..	17,076 lb.	853 16 0
Cigars ..	..	..	2,270 "	170 4 4
Perfumery, essences, &c., medicinal preparations (excepting medicated wine or wine mixed with food) containing more than 50 per cent. proof spirit ..	..	..	56,676 "	2,125 6 10
Culinary and flavouring essences ..	..	..	3,032 gal.	1,819 4 4
Perfumed spirits ..	..	..	71 "	70 12 3
Toilet preparations ..	..	..	135 "	81 2 4

Goods received from the Cook Islands and Niue, or Savage Island, are treated as produce of New Zealand and not as trade. The following were the principal articles from these Islands during 1910:—

Article.	Quantity.	Value.
Fruit-juices ..	3,168 gal.	158
Coffee, raw ..	27,392 lb.	677
Copra ..	785 tons	14,389
Fruits, fresh ..	11,765,708 lb.	70,271
Hats and caps ..	4,823 doz.	2,757
Cocoanuts ..	70,316 No.	341
Vegetables ..	..	145
Specie, silver ..	..	500
Other articles ..	..	801

£90,039

CUSTOMS REVENUE.

The Customs and excise duties received during the last five years are shown in detail, also the rate of revenue per head of mean population, inclusive and exclusive of Maoris, for each year:—

	1906.	1907.	1908.	1909.	1910.
	£	£	£	£	£
CUSTOMS DUTIES.					
Spirits	556,393	595,218	604,107	577,233	616,835
Wine	37,532	42,737	42,799	38,749	40,888
Ale, beer, &c. ..	25,158	27,911	27,178	25,232	27,159
Cigars, cigarettes, and snuff	139,065	159,037	168,745	162,940	176,347
Tobacco	363,981	376,779	391,554	397,000	400,418
Coffee, cocoa, &c. ..	6,179	7,595	7,357	6,370	7,832
Sugar and molasses	214,134	166,335	*	*	*
Opium	130	111	29	39	64
Other goods by weight	213,286	226,322	201,563	182,695	214,772
<i>ad valorem</i> ..	1,210,617	1,317,206	1,262,659	1,088,767	1,226,072
Other duties	87,604	101,539	134,901	113,573	122,066
Parcels-post	45,074	58,632	62,194	52,541	60,177
Primage	..	..	..	1,969	..
Burtax	..	..	..	6,503	62,359
Totals, Customs duties	2,899,103	3,079,422	2,903,086	2,653,617	2,954,989

* Duty abolished in 1907.

	1906.	1907.	1908.	1909.	1910.
	£	£	£	£	£
EXCISE DUTIES.					
Tinctures—New Zealand ..	2,556	4,517	2,770	3,766	4,096
Cigars, cigarettes, and snuff					
—New-Zealand-manufactured ..	343	353	280	170	170
Tobacco — New-Zealand-manufactured ..	1,129	985	1,014	1,086	854
Beer—New Zealand ..	103,986	113,120	116,845	114,799	117,493
Totals, excise duties ..	108,014	118,975	120,909	119,821	122,613
Revenue from Customs duties	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
per head of mean population (excluding Maoris) ..	3 4 9	3 7 0	3 1 5	2 14 7	2 19 6
Ditto (including Maoris) ..	3 1 6	3 3 8	2 18 6	2 12 1	2 16 9
Revenue from excise duties					
per head of mean population (excluding Maoris) ..	0 2 4·9	0 2 7·1	0 2 6·7	0 2 5·6	0 2 5·6
Ditto (including Maoris) ..	0 2 3·5	0 2 5·5	0 2 5·2	0 2 4·2	0 2 4·3

Details of Customs Revenue for twenty years are given :—

CUSTOMS REVENUE PER HEAD OF EUROPEAN POPULATION.

			£	s.	d.				£	s.	d.
1891	..	..	2	9	7	1901	..	..	2	16	4
1892	..	..	2	11	6	1902	..	..	2	17	3
1893	..	..	2	10	4	1903	..	..	3	1	0
1894	..	..	2	6	4	1904	..	..	3	2	9
1895	..	..	2	6	9	1905	..	..	3	1	0
1896	..	..	2	9	11	1906	..	..	3	4	9
1897	..	..	2	13	0	1907	..	..	3	7	0
1898	..	..	2	13	3	1908	..	..	3	1	5
1899	..	..	2	14	5	1909	..	..	2	14	7
1900	..	..	2	16	10	1910	..	..	2	19	6

Besides an alteration of tariff in 1895 in some items, certain duties were lowered and exemptions granted in the year 1900. The duty on tea was brought to 2d. per pound, instead of 4d.; currants and raisins were lowered to 1d. per pound; candles to 1d.; cocoa and roasted coffee to 3d. There was also reduction on stearine for match-making, on paraffine wax, and wax matches. The duty on patent and proprietary medicines was made 15 per cent., also that on certain drugs and chemicals, while the charge on steam-engines, or parts thereof, became 5 per cent. Various exemptions came into force.

In 1907 the Customs tariff was completely revised and some important alterations made. Among articles placed upon the free list are: Sugar, molasses and treacle, currants, raisins, figs, dates, prunes, unground spices, mustard, maizena, cornflour, almonds and nuts (excepting walnuts), carbonate and bicarbonate of soda, tartaric acid, infants' foods, forfar, dowlas, and flax-sheeting, vegetable oils, fencing staples and standards, sheet lead; gas, electricity, and water meters; rubber and pneumatic tires for carriages. Children's boots Nos. 0-6 and tea in bulk are admitted free if of British manufacture or growth.

Increased rates of ordinary duty were imposed on certain articles, among which are found: Flavouring essences, n.o.e., medicinal preparations, drugs and druggists' sundries, candles, paraffine wax, hosiery, cash-registers, cartridges (shot), 10-24 bore, cartridge-cases, certain sizes of iron and fibre pipes, mouldings and panels.

Tea, the produce of British dominions, if in packages of 5 lb. in weight or over is admitted free, in packages under 5 lb. 2d. per pound. The preferential duty on tea of foreign growth is 2d. per

pound if in packages of 5 lb. in weight or over, and $\frac{2}{3}$ d. per pound if in packages of a lesser weight than 5 lb.

The Customs Duties Amendment Act, 1909, imposes a surtax of 1 per cent. on the amount of duty payable on tobacco, cigars, and cigarettes, and of $2\frac{1}{2}$ per cent. on the amount of duty payable on all other dutiable goods. This surtax remained in operation until 31st March, 1911.

The Customs revenue for 1910 was increased by the sum of £98,852 in consequence of the preferential tariff, but the exemption in favour of British-grown tea has resulted in a considerable loss of revenue. The duty collected on all tea imported in 1903 was £43,606, while in 1910 only £636 was received. Sugar, from which the duty has been removed, yielded an average revenue of £194,000 during the years 1903-7.

The tariff (general and preferential) has been given in full in this section. The rates of duty levied include 16s. per gallon on spirits; 30s. per gallon on perfumed spirits; 7s. per pound on cigars and snuff; 17s. 6d. per 1,000, of $2\frac{1}{2}$ lb. and under, on cigarettes; also 3s. 6d. per pound on manufactured and 2s. on unmanufactured tobacco. Sparkling wine is charged 9s. a gallon; Australian, 5s.; other kinds, 6s.; ale and beer, 2s. The duty on cocoa, chocolate, and chicory is 3d. per pound; roasted coffee, 3d. Opium is charged 40s. per pound, but this article, in a form suitable for smoking, cannot now be legally imported. The remainder of the Customs revenue, with small exception, is made up of charges on goods by weight, *ad valorem* duties, ranging from 5 to 40 per cent., and receipts from the foreign parcels-post. There is also an excise duty of 1s. per pound on tobacco; 1s. 6d. per pound on cigars and snuff; 3d. per gallon on beer; 9d. per pound on medicinal preparations (with exceptions) containing more than 50 per cent. of proof spirit, which, if less than 50 per cent., would be free. Toilet preparations subject to 16s. liquid gallon on importation, 12s. the liquid gallon, or when subject to 25 per cent. duty, 6s. per gallon. Also, 12s. per gallon on culinary and flavouring essences, and 20s. on perfumed spirits.

The excise duty on cigarettes made in New Zealand is now (from the 31st December, 1896) 2s. 6d. per pound on machine-made and 1s. per pound on hand-made cigarettes.

All packages of manufactured tobacco must be labelled before leaving the manufactory, and it is necessary to obtain warrants to use cutting-machines for cutting duty-paid manufactured tobacco for sale (or to be used in the manufacture of cigarettes by hand), and to manufacture cigarettes by hand, under certain conditions.

The duties authorized by the Timber Export Act, 1908, will be found following the full tariff.

PREFERENTIAL TARIFF.

In 1903 the Legislature of New Zealand, with the object of encouraging trade between this country and other parts of the British Empire, imposed a surtax upon certain goods not being the produce or manufacture of some part of the British dominions. This may be regarded as the small beginning of what under the tariff of 1907 came to be a substantial protection to the British producer.

In 1907, while the tariff was under revision, some changes were made in the preferential duties of 1903, and the number of articles subject to the surtax greatly increased, until at present 193 of the total of 436 items on the tariff come under this head. The articles upon which differential duty is charged are specified in the tariff given further on in this section.

The value of imports into New Zealand from foreign countries has never assumed large proportions, ranging from 13·5 to 17 per cent. of the total during the past ten years. From 1899 to 1904 there was a steady increase, but since the latter year the proportion has fallen, a result, no doubt, in a large measure due to the preferential treatment of British goods.

During the three years 1905-7, when the preferential tariff of 1903 was in full operation, the proportion of the value of goods imported upon which the surtax was charged, to the total value of goods imported, excluding specie, was—

Year.					Value of Imports subject to Surtax. £	Proportion to Total Value of Imports (excluding Specie) Per Cent.
1905	..	..	..	..	599,764	4·81
1906	..	..	..	..	620,600	4·34
1907	..	..	..	..	658,027	3·98

The greater number of articles included in the differential list in 1908 has increased the total value of imported articles subject to the surtax, and also the proportion to total imports as follows:—

Year.					Value of Imports subject to Surtax. £	Proportion to Total Value of Imports (excluding Specie). Per Cent.
1908	..	..	..	..	895,007	5·19
1909	..	..	..	..	842,407	5·69
1910	..	..	..	..	1,000,267	5·97

In connection with the subject of preferential duties, tables are annexed to illustrate the position in regard to two specially selected important foreign States at the time the additional duties were authorized. The tables also exhibit the fact that the value of free goods introduced increased at a greater rate since the year 1901 than of those which paid duty:—

IMPORTS FROM THE UNITED STATES OF AMERICA.

Year.	On the East Coast.		On the West Coast.		Total Imports.	
	Admitted Free of Duty.	On which Duty Payable.	Admitted Free of Duty.	On which Duty Payable.	Admitted Free of Duty.	On which Duty Payable.
	£	£	£	£	£	£
1901 ..	618,312	556,483	146,023	94,492	*764,335	650,925
1902 ..	527,525	619,050	53,661	118,701	581,186	737,751
1903 ..	522,581	716,954	57,430	144,393	580,011	861,347
1904 ..	629,560	679,742	51,509	167,104	681,069	846,846
1905 ..	541,685	668,933	54,415	173,468	596,100	842,401
1906 ..	529,572	638,699	52,230	185,280	581,802	823,979
1907 ..	562,805	708,747	25,324	128,720	588,129	837,467
1908 ..	816,176	685,005	52,564	90,192	868,740	775,197
1909 ..	563,972	460,926	39,912	101,253	603,884	562,179
1910 ..	696,087	538,873	69,055	95,722	765,142	634,595

* Of this sum £100,497 was value of goods for Government use.

IMPORTS FROM GERMANY.

Year.			Proportions per Cent.	
	Admitted Free of Duty.	On which Duty Payable.	Admitted Free of Duty.	On which Duty Payable.
	£	£		
1901	40,377	158,144	20·33	79·67
1902	46,084	164,476	21·89	78·11
1903	70,191	204,106	25·59	74·41
1904	69,594	239,210	22·54	77·46
1905	64,920	212,547	23·40	76·60
1906	109,538	227,422	32·51	67·49
1907	102,677	248,957	29·20	70·80
1908	144,824	244,707	37·18	62·82
1909	129,574	198,273	39·52	60·48
1910	146,830	244,965	37·48	62·52

VALUE OF FREE AND DUTIABLE IMPORTS.

The values of the imports into New Zealand during the years 1909 and 1910 are given in the next table, classified according to the duties to which they were liable, and arranged so as to show the declared value of goods on which specific or *ad valorem* duties at various rates are payable, and of those admitted free of duty.

Duties to which Imports liable.	Value of Imports, 1909.		Value of Imports, 1910.	
Specific duties	£	2,097,477	£	2,424,180
<i>Ad valorem</i> duties—				
5 per cent.	65,510		59,665	
10 per cent.	89,386		85,159	
15 per cent.	31,851		35,484	
19½ per cent.	11		40	
20 per cent.	2,679,370		3,027,033	
22½ per cent.	26,265		28,856	
24 per cent.	9,353		14,921	
25 per cent.	1,288,275		1,431,983	
30 per cent.	481,299		585,714	
33¾ per cent.	6,774		5,896	
37½ per cent.	72,390		89,641	
40 per cent.	1,429		1,326	
Various	199,029		211,531	
Parcels-post (various) ..	..	4,950,942 279,684	..	5,577,249 307,299
Duty-free (excluding specie)	..	7,489,359	..	8,439,495
Specie imported	..	857,257	..	303,360
Totals	..	15,674,719	..	17,051,583

By the Customs Duties Amendment Act, 1909, a surtax of 1 per cent. of the amount of duty payable under the existing tariff in the case of tobacco, cigars, and cigarettes, and of 2½ per cent. of the amount of duty payable in the case of all other dutiable goods, is imposed on and from the 24th November, 1909. This surtax is not included in the rates of duty shown in the above table.

The proportions of free and dutiable goods imported during 1899, 1904, 1906, and 1910 are compared with similar figures for 1894, the year preceding that in which an altered tariff came into force. A further revision was made in 1907, as previously remarked.

	1894.	1899.	1904.	1906.	1910.
Merchandise—	£	£	£	£	£
Free	1,871,772	2,942,999	4,802,608	5,476,949	8,439,495
Dutiable	4,118,405	5,670,657	8,097,422	8,826,221	8,308,728
Imports (less specie)	5,990,177	8,613,656	12,900,030	14,303,170	16,748,223
Percentage of free merchandise ..	Per Cent. 31·25	Per Cent. 34·17	Per Cent. 37·23	Per Cent. 38·29	Per Cent. 50·39
Total net duty received*	£ 1,572,467	£ 2,046,452	£ 2,655,166	£ 2,903,131	£ 2,960,109
Duty, per cent. of imports—	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
(a.) On dutiable imports	38·18	36·09	32·79	32·89	35·63
(b.) On all merchandise	26·25	23·76	20·58	20·30	17·67

* Including excise duties levied on certain imports manufactured in bond.

The average rate levied on dutiable goods in 1910 was 2·74 per cent. higher than before the tariff revision of 1907, the increase being mainly due to the surtax on foreign goods, but the average on all merchandise shows a decrease. The proportion of imported merchandise free of duty increased considerably since 1906, showing the effect of remissions under the new tariff.

CUSTOMS TARIFF.

The following are the principal clauses of the Customs Duties Amendment Act, 1909, which came into operation on the 24th November, 1909:—

(2.) On all dutiable goods imported into New Zealand or entered for home consumption after the coming into operation of this Act, in addition to all other duties of Customs or excise payable on those goods under the Customs Duties Act, 1908, the Customs Law Act, 1908, or the Tobacco Act, 1908, there shall be payable, at the time when those duties are payable, a further duty of Customs or excise as the case may be (to be called a surtax) of one per centum of

the amount of each of those duties respectively in the case of tobacco, cigars, and cigarettes, and of two and a half per centum of the amount of each of those duties respectively in the case of all other dutiable goods.

(3.) This Act shall not extend to the Cook Islands.

(4.) Nothing in this Act shall affect the existing reciprocal treaty between the Government of New Zealand and the Government of certain colonies in South Africa referred to in section eight of the Customs Duties Act, 1908.

(5.) The resolution of the House of Representatives relating to primage duty, passed on the tenth day of November, nineteen hundred and nine, shall be deemed to have taken effect and to have had the force of law according to the tenor of that resolution, and to have so continued until the commencement of the twenty-fourth day of November, nineteen hundred and nine, and no longer.

(6.) No refund shall be made to or recoverable by any person in respect of any duty of Customs or excise paid before the passing of this Act in conformity with the resolution referred to in the last preceding section, or in conformity with the resolution of the House of Representatives relating to surtax, and passed on the twenty-third day of November, nineteen hundred and nine, and all such duty shall be deemed to have been lawfully collected and paid in accordance with the Customs Duties Act, 1908, the Customs Law Act, 1908, and the Tobacco Act, 1908.

(7.) The duty imposed by this Act shall cease to be chargeable after the thirty-first day of March, nineteen hundred and eleven, in respect of any goods imported into New Zealand or entered for home consumption after that day.

THE CUSTOMS TARIFF OF NEW ZEALAND.—TARIFF OF DUTIES.

NOTE.—The headings of the respective classes in Schedules A and B are solely used for convenience of classification, and shall not in any way affect the interpretation of the Tariff.

The word "iron" includes steel, or steel and iron combined.

Neither steam-engines, nor parts of steam-engines, nor boilers (land or marine), nor feed-water heaters, fuel-economizers, steam-superheaters, or mechanical stokers are included in the expression "machines" or "machinery" as used in the Tariff.

The abbreviation "n.o.e." means "not otherwise enumerated."

SCHEDULE A.

Tariff Item No.	Goods.	Ordinary Tariff.	Rate of Duty.
CLASS I.—FOODS AND ARTICLES FOR HUMAN CONSUMPTION.			
Goods subject to fixed rates, except as specified:—			
1	Bacon, and hams	2d. the lb.	7½d. the cwt.
2	Biscuits, ships', plain and unsweetened; also dog-biscuits	3s. the cwt.	8d. the lb.
3	Biscuits, other kinds	2d. the lb.	8d. the lb.
4	Candied peel, and drained peel	3d. the lb.	8d. the lb.
5	Confectionery n.o.e.; including medicated lozenges, medicated confectionery, boiled sugars, liquorice n.o.e., sugared or crystallized fruits	2d. the lb., including internal containing packages (other than plain bottles and plain trade packages)	2d. the lb., including internal containing packages (other than plain bottles and plain trade packages).
6	Chocolate confectionery and confectionery containing chocolate:— (1.) In plain trade packages (2.) In fancy packages, or in small packages for retail sale	3d. the lb. 20% ad val.	3d. the lb. 4% ad val.

		10s. the cwt. . .	5s. the cwt.
7	Fish, dried, pickled, or salted, n.o.e.	..	..
8	Fish, potted, and preserved (NOTE.—The term "fish" is used in the Tariff in its widest sense, and includes shellfish, crustaceans, and other foods obtained from the fisheries.)	..	1d. the lb., including any liquor, oil, or sauce. (NOTE.—Sardines are not subject to preferential duty.)
9	Fruits, dried—viz., currants, and raisins	..	Free.
10	Fruits, dried—viz., figs, dates, and prunes	..	Free.
11	Fruits, dried, n.o.e.	..	2d. the lb.
12	Fruits, fresh—viz., apples, pears, plums, cherries, peaches, nectarines, medlars, apricots, quinces, tomatoes, and grapes (No duty exceeding ½d. the lb. to be levied on apples and pears on and from the 14th July to and including 31st December.)	..	1d. the lb.
13	Fruits, fresh—viz., currants, raspberries, gooseberries, blackberries, strawberries, and lemons	..	½d. the lb.
14	Fruit-pulp, partially preserved fruit, fruit preserved by sulphurous acid, unsweetened and n.o.e.	..	1½d. the lb.
15	Glucose, and caramel	..	1d. the lb.
16	Honey	..	2d. the lb.
17	Jams, jellies, marmalade, and preserves	..	2d. the lb., or package of that reputed weight, whichever rate is higher, and so in proportion for packages of greater or less reputed weight.
18	Jellies, concentrated	..	¾d. the lb.
19	Maizena and cornflour	..	..
20	Mustard	..	Free.
21	Pearl barley	..	Free.
22	Peas, split	..	1s. the cwt.
23	Pickles	..	2s. the cwt.
24	Sauces, catsup, and chutney	..	3s. the gallon. 4s. the gallon.

SCHEDULE A—continued.

Tariff Item No.	Goods.	Ordinary Tariff.	Rate of Duty.
CLASS I.—FOODS AND ARTICLES FOR HUMAN CONSUMPTION—continued.			
Goods subject to fixed rates, except as specified—continued.			
25	Soy, in vessels of 10 gallons capacity or under	4s. the gallon.	
26	Spices, ground, n.o.e., including pepper, pimento, and olive-stones, ground	2d. the lb.	3d. per lb.
27	Spices, unground, including chillies, pepper, and pimento, unground	Free.	
28	Sugar	Free.	
29	Treacle and molasses	Free.	
30	Vinegar, not exceeding 6·5 per cent. of acidity, calculated as acetic acid	6d. the gallon	13d. per gallon.
31	Walnuts, shelled or unshelled	2d. the lb.	
Goods subject to 20 per cent. ad val. :—			
32	Capers, caraway-seeds, caviare, cayenne pepper, curry powder and paste, fish-paste, olives	20% ad val.	
33	Lard, and refined animal fats. n.o.e.	20% ad val.	10% ad val.
34	Meats, potted or preserved	20% ad val.	10% ad val.
35	Provisions n.o.e.	20% ad val.	10% ad val.
36	Vegetables, fresh, dried, or preserved	20% ad val.	10% ad val.
Goods subject to 25 per cent. ad val. :—			
37	Fruits, preserved in juice, or syrup (Fruits, preserved in juice, or syrup, fortified with alcohol to any extent exceeding 33 per cent. of proof spirit, shall be charged 16s. per proof gallon on such juice or syrup, in addition to 25 per cent. ad val. on the total value of the goods.)	25% ad val.	12½% ad val.
38	Milk or cream, preserved, evaporated, or dried	25% ad val.	12½% ad val.

CLASS II.—TOBACCO.

Goods subject to fixed rates :—

39	Cigarettes, not exceeding in weight 2½ lb. per 1,000	17s. 6d. the 1,000.
40	Cigarettes, n.o.e.	7s. the lb.
41	Cigars, including the weight of every band, wrapper, or attachment, to any cigar	7s. the lb.
42	Snuff	7s. the lb.
43	Tobacco, including the weight of every label, tag, or other attachment	3s. 6d. the lb.
44	Tobacco, unmanufactured, entered to be manufactured in New Zealand in any licensed tobacco-manufactory, for manufacturing purposes only, into tobacco, cigars, cigarettes, or snuff	2s. the lb.

CLASS III.—ALCOHOLIC BEVERAGES AND MATERIAL FOR MAKING THE SAME.

Goods subject to fixed rates :—

45	Ale, beer of all sorts, porter, cider, and perry, when containing more than 2 per cent. of proof spirit ; the gallon, or for six reputed quart bottles or the equivalent in bottles of a larger or smaller reputed quantity	2s. the gallon.
46	Cordials, bitters, and liqueurs, when exceeding the strength of 33 per cent. of proof spirit, but not exceeding the strength of proof	16s. the liquid gallon.
47	Cordials, bitters, and liqueurs, when exceeding the strength of proof	16s. the proof gallon.
48	Hops	6d. the lb. .. 3d. the lb.
49	Maize, flaked	1s. the bushel.
50	Malt, whole or ground	2s. the bushel.
51	Rice malt	1d. the lb.
52	Solid wort	6d. the lb.
53	Spirits, and spirituous mixtures, the strength of which can be ascertained by Sykes's hydrometer or other instrument	16s. the proof gallon.
54	Spirits, and spirituous mixtures of a less strength than 16·5 under proof, (No allowance beyond 16·5 under proof shall be made for spirits or spirituous mixtures of a less strength than 16·5 under proof.)	16s. the liquid gallon.

SCHEDULE A—*continued*.

Tariff Item No.	Goods.	Rate of Duty.	
		Ordinary Tariff.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).
	CLASS III.—ALCOHOLIC BEVERAGES AND MATERIAL FOR MAKING THE SAME—<i>continued</i>. Goods subject to fixed rates—<i>continued</i>.		
55	Spirits, and spirituous mixtures, sweetened, n.o.e., when exceeding the strength of proof	16s. the proof gallon.	
56	Spirits, and spirituous mixtures, in bottles or jars in cases, shall be charged as follows—viz.: Two gallons and under as two gallons, over two gallons and not exceeding three as three gallons, over three gallons and not exceeding four as four gallons, and so on for any greater quantity contained in any case.	16s. the liquid gallon.	
57	Spirits, and spirituous mixtures, containing more than 33 per cent. of proof spirit, in combination with other ingredients, and although thereby coming under any other designation excepting medicinal preparations otherwise enumerated	5s. the gallon.	
58	Wine.—The term "wine" as applied to the Tariff includes medicated wine, or wine mixed with food; also such spirituous beverages, and fluid foods, containing less than 33 per cent. of proof spirit, as may be so decided by the Minister.	6s. the gallon.	
59	Wine, Australian, containing not more than 40 per cent. of proof spirit; the larger or smaller reputed quantity	9s. the gallon.	
60	Wine, other than sparkling, and Australian, containing not more than 40 per cent. of proof spirit; the gallon, or for six reputed quart bottles, or the equivalent in bottles of a larger or smaller reputed quantity	16s. the liquid gallon.	
	Wine, sparkling, containing not more than 40 per cent. of proof spirit; the gallon, or for six reputed quart bottles, or the equivalent in bottles of a larger or smaller reputed quantity		
	Wine of any kind containing more than 40 per cent. of proof spirit		

CLASS IV.—NON-ALCOHOLIC BEVERAGES, AND MATERIALS FOR MAKING THE SAME.

Goods subject to fixed rates :—

61	Chicory .. ..	.. ..	.. ..	.. ..	3d. the lb.	.. ..	3d. the lb.
62	Cocoa, and chocolate, including cocoa-beans roasted and crushed ; also cocoa or chocolate mixed with milk or any other food substance whatsoever	.. ..	.. ..	.. ..	3d. the lb.	.. ..	3d. the lb.
63	Coffee, roasted .. ..	.. ..	.. ..	.. ..	3d. the lb.	.. ..	3d. the lb.
64	Tea n.o.e. .. ..	.. ..	.. ..	.. ..	2d. the lb.	.. ..	3d. the lb.
Goods subject to 20 per cent. ad val. :—							
65	Aerated, and mineral waters ; effervescing beverages ; and beverages n.o.e.						
66	Coffee, essence of ; and essence of coffee with milk or any other food substance						
67	Fruit juices or imitation fruit juices, unsweetened, in containers of less than 10 gallons capacity						
68	Fruit juices or imitation fruit juices, sweetened ; syrups ; raspberry vinegar, sweetened						

CLASS V.—DRUGS, MEDICINES, CHEMICALS, AND DRUGGISTS' SUNDRIES.

Goods subject to fixed rates, except as specified :—

69	Acid, acetic, containing not more than 30 per cent. of acidity	.. ..	1½d. the lb.
70	Acid, acetic, containing more than 30 per cent. of acidity, for every 10 per cent. of acidity or fraction thereof	.. ..	4d. the lb.
71	Acid, tartaric .. ..	.. ..	Free.
72	Cream of tartar .. ..	.. ..	Free.
73	Essences flavouring, containing more than 33 per cent. of proof spirit	.. ..	16s. the liquid gallon.
74	Medicinal preparations (excepting medicated wines or wines mixed with food), containing more than 50 per cent. of proof spirit	.. ..	1s. the lb.
75	Opium .. ..	.. ..	£2 the lb.
76	Saccharin n.o.e., including substances of a like nature or use	.. ..	1s. 6d. the ounce.

SCHEDULE A—continued.

Tariff Item No.	Goods.	Rate of Duty.	
		Ordinary Tariff.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).
CLASS V.—DRUGS, MEDICINES, CHEMICALS, AND DRUGGISTS' SUNDRIES—continued.			
Goods subject to fixed rates—continued.			
77	Soda, bicarbonate	Free.	44d. the cwt.
78	Soda-crystals	2s. the cwt. ..	..
Goods subject to 20 per cent. ad val. :—			
79	Baking powder ; yeast preparations, and other ferments ; also yeast foods	20% ad val. ..	10% ad val.
80	Chemicals, and chemical preparations, n.o.e., including photographic chemicals n.o.e. ; also anti-incrustation, boiler, and other compounds	20% ad val. ..	10% ad val.
81	Essences, flavouring, n.o.e.	20% ad val. ..	10% ad val.
82	Eucalyptus oil in bulk or bottle	20% ad val. ..	10% ad val.
83	Glycerine, refined	20% ad val. ..	10% ad val.
84	Medicinal preparations, drugs, and druggists' sundries, and apothecaries' wares, n.o.e. ; also aerated water makers', and cordial manufacturers', and brewers' drugs, chemicals, and other sundries, n.o.e.	20% ad val. ..	10% ad val.
85	Medicinal preparations (excepting medicated wines or wines mixed with food) containing 50 per cent. of proof spirit or less	20% ad val. ..	10% ad val.
86	Saccharin, in the form of tablets, pilules, granules, or cachets, each containing not more than $\frac{1}{2}$ grain of saccharin in combination with at least 10 per cent. of alkali	20% ad val. ..	10% ad val.
CLASS VI.—CLOTHING AND TEXTILE GOODS.			
Goods subject to fixed rates of duty :—			
87	Cotton, raw	4d. the lb.	..

Goods subject to 20 per cent. ad val. :—			20% ad val.
88	All articles n.o.e., made of textile, felt, or other piece-goods, or of any combination of the same, wholly or partly made up or manufactured, and not being apparel or clothing either wholly or partly made up		
89	Drapery n.o.e.	..	20% ad val.
90	Flags	..	20% ad val.
91	Haberdashery n.o.e.	..	20% ad val.
92	Lace, and laces, n.o.e.	..	20% ad val.
93	Ribbons, and crepe, all kinds	..	20% ad val.
94	Rugs, woollen, cotton, opossum, or other	..	20% ad val.
95	Textile piece-goods n.o.e., including imitation silks, composed of any material or substance whatsoever	..	20% ad val.
96	Umbrellas, parasols, and sunshades	..	20% ad val.
97	Yarns n.o.e.	..	20% ad val.
Goods subject to 25 per cent. ad val. :—			
98	Apparel, and ready-made clothing, n.o.e.	..	25% ad val.
99	Feathers, ornamental (including ostrich); artificial flowers, leaves, and sprays	..	25% ad val.
100	Furs, and fur trimmings	..	25% ad val.
101	Hats of all kinds (including straw hats), also caps	..	25% ad val.
102	Hosiery n.o.e.	..	25% ad val.
103	Millinery of all kinds, including trimmed hats, caps, and bonnets	..	25% ad val.
Goods subject to 40 per cent. ad val. :—			
104	Apparel made to the order, or measurement, of residents in the Dominion and intended for the individual use of such residents, whether imported by the residents themselves or otherwise		40% ad val.
105	Apparel—viz., Volunteer clothing made to measurement sent from New Zealand		40% ad val.

SCHEDULE A—continued.

Tariff Item No.	Goods.	Rate of Duty.	
		Ordinary Tariff.	
		Preferential Surtax on Foreign Goods (Schedules C, D, and E).	
CLASS VII.—LEATHER AND MANUFACTURES OF LEATHER.			
106	Goods subject to mixed rates :—		
	Boots, shoes, clogs, and pattens, n.o.e., viz.—		
	Men's, above size No. 5	1s. 6d. the pair, and 15% ad val.	9d. the pair, and 7½% ad val.
	Youths', above size No. 1	1s. the pair, and 15% ad val.	6d. the pair, and 7½% ad val.
	Boys', Nos. 7 to 1 both inclusive	6d. the pair, and 15% ad val.	3d. the pair, and 7½% ad val.
	Women's above size No. 1	1s. the pair, and 15% ad val.	6d. the pair, and 7½% ad val.
	Girls', Nos. 7 to 1, both inclusive.. ..	6d. the pair, and 15% ad val.	3d. the pair, and 7½% ad val.
	Other kinds	1s. the pair, and 15% ad val.	6d. the pair, and 7½% ad val.
	Slippers (not including lawn tennis, and gymnasium shoes soled with india-rubber or felt)	6d. the pair, and 15% ad val.	3d. the pair, and 7½% ad val.
	Slippers of felt, with carpet, twine, or felt soles	22½% ad val.	11¼% ad val.
	Shoes or goloshes known as Plimsolls with moulded india-rubber soles	22½% ad val.	11¼% ad val.
	Champion, gymnasium, yachting, and lawn tennis boots, and shoes, with moulded india-rubber soles	22½% ad val.	11¼% ad val.
107	Goloshes or overshoes of all kinds, of rubber	22½% ad val.	11¼% ad val.
	Shoettes, and sandals, n.o.e.	22½% ad val.	11¼% ad val.
	Goods subject to fixed rates :—		
	Leather—		
	Leather belting, belt leather, harness, welting, bridle, strap, legging, bag, and kip other than East India	4d. the lb.	

108	All hide leathers dressed n.o.e., (NOTE.—Any leathers n.o.e. (1) either dressed in sides, or pieces of whatever size, or (2) if in whole skins over 16 ft., are to be classed as hide leather.)	3d. the lb.	
	Calf skins, being whole skins, however dressed, and 16 ft. spread and under	1d. the lb.	
	Sheepskins, and lambskins, however dressed, n.o.e.	3d. the lb.	
	East India kip, dressed	1d. the lb.	
	Sole, pump, and skirt leather	2d. the lb.	
109	Leather dressed n.o.e., including kangaroo, and wallaby	1d. the lb.	
	Leather board or compo	4d. the lb.	
	Goods subject to 20 per cent. ad val. :—	20% ad val.	10% ad val.
	Leather bags, and leather cloth bags, n.o.e.	20% ad val.	10% ad val.
110	Leather, chamois	..	10% ad val.
111	Leather manufactures n.o.e.	20% ad val.	10% ad val.
112	Saddlery, and harness; whips and whip thongs	20% ad val.	10% ad val.
113	Goods subject to 22½ per cent. ad val. :—	22½% ad val.	11½% ad val.
	Heel plates, and toe stiffeners, and toe plates	22½% ad val.	11½% ad val.
	Laces, vamps, and uppers; also clog or patten soles	22½% ad val.	11½% ad val.
	Leather cut into shapes	22½% ad val.	11½% ad val.
	Leather leggings	22½% ad val.	11½% ad val.
117	Goods subject to 25 per cent. ad val. :—	25% ad val.	12½% ad val.
	Portmanteaux; trunks; travelling bags, and brief bags, of leather or leather cloth, 10 in. in length and upwards; and carpet bags	..	..
CLASS VIII.—FURNITURE AND HOUSEHOLD FURNISHING.			
Goods subject to 20 per cent. ad val. :—			
118	Basketware, and wickerware, n.o.e., not being furniture	..	10% ad val.
119	Carpets; druggets; floorcloth; mats; matting; plain, and fancy stair oil baize; wood, and fancy oil baize; and oil, and other dado cloths	20% ad val. 20% ad val.	..
120	Furniture, knife, and plate powder, and polish; also floor and linoleum polishes, not being varnishes	20% ad val.	10% ad val.

SCHEDULE A—continued.

Tariff Item No.	Goods.	Rate of Duty.		
		Ordinary Tariff.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).	
CLASS VIII.—FURNITURE AND HOUSEHOLD FURNISHING—continued.				
Goods subject to 25 per cent. ad val. :—				
121	Furniture, and cabinetware, n.o.e., and other than iron, or other metal ..	25% ad val. ..	..	12½% ad val.
122	Mantelpieces, other than stone ..	25% ad val. ..	..	12½% ad val.
123	Upholstery n.o.e. ..	25% ad val. ..	..	12½% ad val.
CLASS IX.—CHINA, GLASS, AND EARTHEN GOODS.				
Goods free of duty :—				
124	Glass, crown, sheet, and common window ..	Free.	..	
Goods subject to 20 per cent. ad val., except as specified :—				
125	Bricks, known as firebricks ..	20% ad val. ..	..	10% ad val.
126	China, porcelain, and parian ware ..	20% ad val. ..	..	10% ad val.
127	Drainage pipes, and drainage tiles ..	20% ad val. ..	..	10% ad val.
128	Earthenware, stoneware, and brownware ..	20% ad val. ..	..	10% ad val.
129	Filters ..	20% ad val. ..	..	10% ad val.
130	Fireclay, ground ; and fireclay goods ..	20% ad val. ..	..	10% ad val.
131	Flooring, wall, hearth, and garden tiles ..	Free.	..	
132	Glass, plate, polished, coloured, and other kinds, n.o.e. ..	20% ad val. ..	..	10% ad val.
133	Glassware ; globes, and chimneys, for lamps..	20% ad val. ..	..	10% ad val.
134	Lamps, lanterns, and lampwick, n.o.e. ..	20% ad val. ..	..	10% ad val.
Goods subject to 25 per cent. ad val. :—				
135	Plate glass bevelled or silvered ; mirrors, and looking-glasses, framed or unframed	25% ad val. ..	..	12½% ad val.

CLASS X.—FANCY GOODS, MUSICAL INSTRUMENTS, ETC.

Goods subject to fixed rates :—

136	Cards, playing	..	..	..	6d. the pack.	
137	Perfumed spirits, and Cologne water	..	..	..	£1 10s. the liquid gallon.	
Goods subject to 20 per cent. ad val. :—						
138	Clocks, time registers, and time detectors	..	..	..	20% ad val.	10% ad val.
139	Fancy goods, and toys ; also sporting, gaming, and athletic requisites, n.o.e., including billiard tables, and billiard requisites ; hair, and toilet combs	..	..	..	20% ad val.	10% ad val.
140	Fishing tackle, including artificially baited hooks, other than flies	..	..	..	20% ad val.	10% ad val.
141	Jewellery ; plate, gold, or silver ; plated-ware ; greenstone, cut or polished	..	..	..	20% ad val.	10% ad val. (except greenstone, cut or polished).
142	Lay figures, busts, and dress stands	..	..	..	20% ad val.	10% ad val.
143	Magic lanterns, bioscopes, cinematographs, kinetoscopes, phonographs, gramophones, graphophones, and the like instruments, including accessories peculiar thereto n.o.e. ; also limelight, and the like apparatus, including accessories peculiar thereto, except magic-lantern slides	..	..	..	20% ad val.	10% ad val.
144	Mouldings, and panels, in the piece, of either wood, plaster pulp, metal, or other material, for picture frames, cornices, walls, or ceilings	..	..	..	20% ad val.	
145	Musical instruments	..	..	..	20% ad val.	10% ad val.
146	Photographic goods n.o.e.	..	..	..	20% ad val.	10% ad val.
147	Pictures, paintings, drawings, engravings, and photographs, framed or unframed ; picture or photograph frames or mounts	..	..	..	20% ad val.	10% ad val. (except pictures, paintings, drawings, engravings, and photographs, framed or unframed.)
(NOTE.—Any painting, drawing, or photograph, in any medium, having a value for duty exceeding £5 shall be assessed for duty at £5, plus the value of the frame and mounting, if any, and plus the value of the canvas or other material upon which such painting, drawing, or photograph is made.)						
148	Statues, statuettes, casts, and bronzes	..	..	..	20% ad val.	10% ad val.
149	Tobacco pipes and cases, cigar and cigarette holders and cases, cigarette papers and cases	..	..	..	20% ad val.	10% ad val.
150	Watches	..	..	..	20% ad val.	
151	Walking-sticks	..	..	..	20% ad val.	10% ad val.
Goods subject to 25 per cent. ad val. :—						
152	Artificial flies	..	..	..	25% ad val.	12½% ad val.
153	Oil, perfumed ; also toilet preparations, and perfumery, n.o.e. ..	..	..	..	25% ad val.	12½% ad val.

SCHEDULE A—continued.

1917 No.	Goods.	Rate of Duty.	
		Ordinary Tariff.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).
CLASS XI.—PAPER MANUFACTURES AND STATIONERY.			
Goods subject to fixed rates :—			
154	Handbills, circulars, programmes, playbills, printed posters, trade catalogues, price-lists, and fashion-plates; printed advertising matter n.o.e.; also paper bags, and wrapping-paper, or wrappers, of all kinds, printed or lithographed; printed or lithographed envelopes or labels	3d. the lb. . . .	3d. the lb.
(NOTE.—This shall not apply to trade catalogues or price-lists of the goods of firms or persons having no established business in New Zealand.)			
155	Ink, writing	2s. the gallon . .	1s. the gallon.
156	Paper bags, coarse (including sugar bags)	7s. 6d. the cwt. . .	3s. 9d. the cwt.
157	Paper wrapping all kinds, not printed including blue candle, glazed cap, glazed casings, small hand, lumber hand, tissue, brown, cartridge, and sugar papers	5s. the cwt. . . .	2s. 6d. the cwt.
158	Goods free of duty :— Paperhangings	Free.	
Goods subject to 20 per cent. ad val. :—			
159	Cardboard, pasteboard, strawboard, wood-pulp board, corrugated board, and cloth-lined board, n.o.e.	20% ad val. . . .	10% ad val.
160	Cloth-lined, enamelled, gelatine, and metallic papers, n.o.e.; also "ivorite" n.o.e.	20% ad val. . . .	10% ad val.
161	Stationery, and writing paper, n.o.e., also printers' menu, wedding, programme, and mourning cards of cardboard, celluloid, or other material, edged, or embossed, but otherwise unprinted	20% ad val. . . .	10% ad val.

162	Goods subject to 25 per cent. ad val. :—				
163	Calendars, and showcards, all kinds	..	..	25% ad val.	12½% ad val.
164	Cardboard- or paper-boxes complete; or cardboard or paper, cut, or shaped, for boxes, wrappers, or other receptacles (including match-boxes)	..	..	25% ad val.	12½% ad val.
165	Directories of New Zealand, or of any part thereof; also covers for directories	..	..	25% ad val.	12½% ad val.
166	Paper bags n.o.e.	..	..	25% ad val.	12½% ad val.
167	Stationery, manufactured, viz.:— Account-books, manuscript-books, scribbling, and letter blocks, and books, plain, or ruled; bill-head, invoice, and statement forms; printed or ruled paper, counter-books, cheque, and draft forms; tags, labels not printed or lithographed, blotting-pads, sketch-books, book-covers, copying letter-books, manifold-writers, albums (other than for photographs), diaries, birthday-books, plain or faint lined ruled books, printed window-tickets, printed, lithographed, or embossed stationery n.o.e., and Christmas, New Year, birthday, Easter, and other cards, and booklets	..	..	25% ad val.	12½% ad val.
168	Stereotypes, matrices, half-tone, and line blocks	..	..	25% ad val.	

CLASS XII.—MANUFACTURES OF METAL.

168	Goods subject to fixed rates, except as specified :—				
169	Cartridges (shot) 10- to 24-bore	..	..	2s. 6d. the 100	1s. 3d. the 100.
170	Cartridge-cases	..	..	1s. 3d. the 100	7½d. the 100.
171	Composition-piping	..	..	3s. 6d. the cwt.	8½d. the cwt.
172	Iron, galvanized corrugated sheets	..	..	2s. the cwt.	4½d. the cwt.
173	Iron, and other nails, n.o.e., including dog-spikes	..	..	2s. the cwt.	1s. the cwt.
174	Iron, plain galvanized sheet or hoop	..	..	1s. 6d. the cwt.	3½d. the cwt.
175	Iron tanks, for every 100 gallons, or fraction of 100 gallons, in holding capacity	..	..	2s. 6d.	6d.
176	Lead, in sheets	..	..	Free.	8½d. the cwt.
177	Lead piping	..	..	3s. 6d. the cwt.	2s. the cwt.
178	Shot	..	..	10s. the cwt.	

SCHEDULE A—continued.

Tariff Item No.	Goods.	Ordinary Tariff.	Rate of Duty.
CLASS XII.—MANUFACTURES OF METAL—continued			
Goods subject to 5 per cent. ad val. :—			
178	Engines and machines for mining purposes—namely, capstan engines for mining shafts; winding engines, steam, air, or electrically driven, including bed plates, foundation bolts, and friction clutches, when imported with the engines; drums for winding engines	5% ad val.	10% ad val.
179	Machinery—viz., flour milling, refrigerating, dredging, woollen mill, paper mill, rope and twine making, oil refining, boring, meat preserving, leather splitting	5% ad val.	10% ad val. (except flour milling, oil refining, and boring machinery).
180	Printing machines or presses; embossing, bronzing, type casting, and type setting machines; ruling machines, cardboard box making machines, and tools for same	5% ad val.	10% ad val. (except type casting and type setting machines).
181	Soda-water machines; also machines for aerating liquids	5% ad val.	10% ad val.
182	Steam engines, and parts thereof, for mining (including gold-dredging), or gold saving purposes and processes, or for dairying purposes	5% ad val.	10% ad val.
Goods subject to 10 per cent. ad val. :—			
183	Machinery, electric, and appliances—namely, electric generators, and electric motors, including slide rails therefor, electric lamps including globes for arc lamps, electric transformers	10% ad val.	5% ad val.
Goods subject to 20 per cent. ad val. :—			
184	Bicycles, tricycles, and the like vehicles, also finished, or partly finished or machined parts of the same, n.o.e.	20% ad val.	10% ad val.
185	Bill-hooks, bush-hooks, slashers, and hedge knives	20% ad val.	10% ad val.
186	Boilers, land, and marine, including feed-water heaters, fuel economizers, steam superheaters, and mechanical stokers	20% ad val.	10% ad val.
187	Cartridges, n.o.e.	20% ad val.	10% ad val.
188	Cash registering machines	20% ad val.	10% ad val.

189	Crab winches, cranes, capstans, and windlasses	..	..	20% ad val.	..	10% ad val.
190	Electric batteries, and cells; furniture, fittings, instruments, and appliances, n.o.e., for the generation, transmission, application, or utilization of electricity, or of electric power of any description whatsoever	..	..	20% ad val.	..	10% ad val.
191	Firearms, all kinds	..	..	..	..	..
192	Hardware, ironmongery, and hollow-ware, n.o.e.	..	..	20% ad val.	..	10% ad val.
193	Iron pipes wrought n.o.e., and wood or fibre pipes, exceeding 6 in. in internal diameter, also knees, bends, elbows, and other fittings for the same.	..	..	20% ad val.	..	10% ad val.
	Cast iron pipes exceeding 9 in. in internal diameter, and other fittings for the same, elbows, and other fittings for the same	..	..	20% ad val.	..	10% ad val.
194	Lawn mowers	..	..	20% ad val.	..	10% ad val.
195	Lead-headed nails and galvanized cup-headed roofing nails	..	..	20% ad val.	..	10% ad val.
196	Machinery, n.o.e.	..	..	20% ad val.	..	10% ad val.
197	Manufactured or partly manufactured articles of metal, or manufactured or partly manufactured articles of metal in combination with any other material whatsoever, n.o.e.	..	..	20% ad val.	..	10% ad val.
198	Steam-engines, and parts of steam-engines, n.o.e.	..	..	20% ad val.	..	10% ad val.

Goods subject to 25 per cent. ad val. :—

199	Galvanized iron manufactures, n.o.e., made up from galvanized iron, or from plain sheet iron, and then galvanized	..	..	25% ad val.	..	121% ad val.
200	Japanned, and lacquered metalware	..	..	25% ad val.	..	121% ad val.
201	Tinware, and tin manufactures, n.o.e.	..	..	25% ad val.	..	121% ad val.

CLASS XIII.—TIMBER, AND ARTICLES MADE FROM TIMBER.

Goods subject to fixed rates :—

202	Timber, palings, split	..	..	2s. the 100.	..	..
203	Timber, posts, split	..	..	8s. the 100.	..	..
204	Timber, rails, split	..	..	4s. the 100.	..	..
205	Timber, sawn, dressed	..	..	4s. the 100 sup. ft.	..	..
206	Timber, sawn, rough	..	..	2s. the 100 sup. ft.	..	..
207	Timber, shingles, and laths	..	..	2s. the 1,000.	..	..

SCHEDULE A—continued.

Tariff Item No.	Goods.	Ordinary Tariff.	Rate of Duty.
CLASS XIII.—TIMBER, AND ARTICLES MADE FROM TIMBER—continued.			
Goods subject to 20 per cent. ad val. :—			
208	Bellows, n.o.e.	20% ad val.	..
209	Blocks, wooden tackle	20% ad val.	10% ad val.
210	Broom, mop, hoe, rake, and similar handles	20% ad val.	..
211	Carriages, carts, drays, wagons, perambulators, and the like vehicles, and wheels for the same	20% ad val.	10% ad val.
212	Carriage shafts, spokes, and felloes, dressed ; bent carriage timber, n.o.e.	20% ad val.	10% ad val. (except motor
213	Cars, wagons, and trucks, railway, and tramway ; and wheels for the same, n.o.e. Motor vehicles. Motor car bodies, or bodies for motor busses, whether attached or unattached	20% ad val.	vehicles, motor car bodies, or bodies for motor busses, whether attached or unattached).
214	Doors, and sashes, either plain, or glazed with ornamental glass	20% ad val.	10% ad val.
215	Woodenware, and turnery, n.o.e., and veneers	20% ad val.	10% ad val.
CLASS XIV.—OILS, PAINTS, ETC.			
Goods subject to fixed rates, except as specified :—			
216	Oils in vessels capable of containing one gallon of oil or more—namely, vegetable oils	Free.	..
217	Oil—namely, crude petroleum, crude residual oil, once-run shale oil, once-run petroleum oil	1d. the gallon	1d. the gallon.
218	Oil, n.o.e., including mineral lubricating-oil, in vessels capable of containing one gallon or more	6d. the gallon	..

219	Paints, and colours, ground in oil or turpentine; also putty; and driers, n.o.e.	2s. 6d. the cwt.	..	6d. the cwt.
220	Paints, and colours, mixed ready for use: also enamel paints, n.o.e.	5s. the cwt.	..	1s. the cwt.
221	Stearine	2d. the lb.	..	$\frac{3}{4}$ d. the lb.
222	Varnish and lacquers, including lithographic varnish, gold size, liquid gold, and other metallic paints; also liquid medium for mixing with metallic paints	2s. the gallon	..	$\frac{4}{4}$ d. the gallon.
223	Whiting, and chalk	1s. the cwt.	..	2 $\frac{1}{2}$ d. the cwt.
224	Goods subject to 20 per cent. ad val.:— Axle grease, and other solid lubricants; petroleum greases, and mixture of the same with other substances, n.o.e.	20% ad val.	..	10% ad val.
225	Harness oil, and composition, leather dressing, and belt dressing; also leather revivers and polishes n.o.e.	20% ad val.	..	10% ad val.
226	Oils in vessels having a lesser capacity than one gallon	20% ad val.	..	
CLASS XV.—AGRICULTURAL AND FARM PRODUCTS, ETC.				
Goods subject to fixed rates:—				
227	Cattle (horned)	10s. each.	..	
228	Chaff	£1 the ton.	..	
229	Grain—namely, barley	2s. the 100 lb.	..	
230	Grain, and pulse, of every kind, n.o.e.	9d. the 100 lb.	..	
231	Grain, and pulse, of every kind, when ground or in any way manufactured, n.o.e., including wheat flour	1s. the 100 lb.	..	2 $\frac{1}{2}$ d. the 100 lb.
232	Horses	£1 each.	..	
233	Onions	£1 the ton.	..	
234	Potatoes	£1 the ton.	..	
235	Prepared calf-meal	£1 5s. the ton.	..	
236	Goods subject to 20 per cent. ad val.:— Animals, food for, of all kinds, n.o.e., including horse, and cattle spices, and condiments, proprietary or otherwise; also hempseed, maw-seed, millet-seed, canary-seed, and mixed bird-seed	20% ad val.	..	10% ad val.

SCHEDULE A—continued.

Tariff Item No.	Goods.	Ordinary Tariff.	Rate of Duty.
CLASS XVI.—MISCELLANEOUS.			
Goods subject to fixed rates, except as specified :—			
237	Blue	1d. the lb. ..	1d. the lb.
238	Candles	1½d. the lb. ..	1½d. the lb.
239	Cement, Portland, and other structural, and building cement ..	2s. the barrel ..	2s. the barrel.
240	Gelatine, isinglass, glue, and size	1½d. the lb. ..	1½d. the lb.
241	Matches :—		
	Wooden, in boxes containing not more than 60 matches	1s. the gross boxes ..	6d. the gross of boxes.
	In boxes containing over 60 and not more than 100 matches ..	2s. the gross boxes ..	1s. the gross of boxes.
	In boxes containing more than 100 matches ; for every 100 matches, or fraction thereof, contained in one box	2s. the gross boxes ..	1s. the gross of boxes.
	Wax, “plaid vestas” in cardboard boxes containing under 100 matches	1s. the gross boxes ..	6d. the gross of boxes.
	“Pocket vestas,” in tin or other boxes, containing under 100 matches	1s. 4d. the gross boxes ..	8d. the gross of boxes.
	Wax, other kinds, for every 100 matches or fraction thereof contained in one box	2s. 3d. the gross boxes ..	1s. 1½d. the gross of boxes.
	Matches of any material other than wood or wax, a duty corresponding to the duty payable on wooden matches.		
	(NOTE.—Boxes made of gold, silver, metal, wood, or composition, of permanent value when empty, shall, in addition to the duty payable on any matches contained therein, be charged as jewellery or fancy goods.)		
242	Paraffin wax	1d. the lb.	
243	Powder, sporting	Free.	
244	Sausage skins, and casings (including brine or salt)	3d. the lb.	
245	Soap, common yellow, and blue mottled	5s. the cwt. ..	1s. the cwt.
246	Spirits, methylated to the satisfaction of the Minister	1s. the liquid gallon ..	22d. the liquid gallon.

247	Spirits cleared from warehouse, methylated under prescribed conditions			6d. the liquid gallon, not including the added naphtha or other methylating material,	
				2d. the lb.	½d. the lb.
248	Starch ..	..	..	..	..
249	Wax, mineral, vegetable, Japanese, and beeswax ..	..	..	1d. the lb.	..
250	Goods subject to 10 per cent. ad val. :—				
	Flock ..	..	..	10% ad val.	..
251	Goods subject to 20 per cent. ad val. :—				
	Bags, calico, forfar, linen, flour; bagging, bags, and sacks, n.o.e., including filter bags, and sheaths ..	..	..	20% ad val.	10% ad val.
252	Blacking, and boot-gloss and -polish ..	..	..	20% ad val.	10% ad val.
253	Blacklead ..	..	..	20% ad val.	10% ad val.
254	Boats, launches, yachts, also all vessels propelled by means other than oars (when imported in any vessel), including all fittings therefor n.o.e.	..	..	20% ad val.	10% ad val.
255	Cordage, rope, and twine, n.o.e. ..	..	..	20% ad val.	10% ad val.
256	Fireworks, n.o.e. ..	..	..	20% ad val.	10% ad val.
257	Nets, and netting ..	..	..	20% ad val.	10% ad val.
258	Soap powder, extract of soap, dry soap, soft soap, liquid soap, soap solutions, and washing, or cleansing powders, crystals, pastes, and liquids	..	..	20% ad val.	10% ad val.
259	Tarpaulins, tents, sails, rick, and wagon covers ..	..	..	20% ad val.	10% ad val.
260	Goods subject to 25 per cent. ad val. :—				
261	Bags of textile or felt, all kinds, if printed ..	..	..	25% ad val.	12½% ad val.
262	Brooms, brushes, and brushware ..	..	..	25% ad val.	12½% ad val.
	Marble, granite, and other stone, dressed, or polished, and articles made therefrom; also imitation stone, dressed, or polished, and articles made therefrom, or from cement	..	..	25% ad val.	12½% ad val. (except marble, dressed or polished, and articles made therefrom.)
263	Soap, n.o.e. ..	..	..	25% ad val.	12½% ad val.
	In addition to any duty chargeable by law on any goods imported into the Dominion, a further duty of 20 per cent. ad val. shall be charged when the goods are prison made.				

SCHEDULE B.

Goods in this Schedule, except where otherwise provided, are exempt from duties of Customs.

Tariff Item No.	Goods.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).
CLASS I.—FOODS, ETC.		
264	Almonds, and nuts, except walnuts.	
265	Anchovies, salted, in casks, or other containers, capable of holding 28 lb. net or over.	
266	Arrowroot (lb.), sago (cwt.), tapioca (cwt.), macaroni (lb.), vermicelli (lb.), rice-flour, prepared barley-flour, potato-flour, infants' and invalids' farinaceous foods.	
267	Cocoa or cacao butter, coconut butter, nut butter, and other refined vegetable butters or fats.	
268	Salt.	
269	Rice, dressed or undressed, also rice meal refuse and rice meal.	
270	Soy, in vessels exceeding 10 gallons capacity.	
CLASS IV.—NON-ALCOHOLIC BEVERAGES, ETC.		
271	Cocoa-beans, uncrushed.	
272	Coffee, raw.	
273	Fruit-juices, or imitation fruit-juices, unsweetened, in containers of 10 gallons capacity or over.	
274	Tea, in bulk—viz., in packages of 5 lb. or over net weight of tea	2d. the lb.
CLASS V.—DRUGS, ETC.		
275	Acids—viz., boracic; carbolic; chromic; citric; fluoric; formic; lactic; muriatic; nitric; oleic; oxalic; picric; pyrogallie; salicylic; sulphuric.	
276	Concentrated extracts, or essences, in liquid form, or preserved in fat, for the purpose of manufacturing perfumery, when entered to be warehoused in a manufacturing warehouse for the purpose of making perfumery or other articles therein.	
277	Dextrine n.o.e.	
278	Disinfectants.	

Carnauba wax.	
Catechu.	
Cochineal.	
Cresote, crude or commercial.	
Crude distillates of coal-tar or wood, in vessels containing 10 gallons or over, for the manufacture of disinfectants in New Zealand.	
Formic aldehyde, and solution thereof.	
Fusel oil.	
Gall nuts.	
Glycerine, crude.	
Gums—viz., arabic, benzoin, damar, tragacanth, artificial gum-arabic.	
Liquefied gases, and compressed gases.	
Liquorice in blocks of 7 lb. net and over, or soft liquorice-extract in bulk, in tins or other vessels capable of holding 7 lb. net or over.	
Naphthalene, crude or refined.	
Saffron.	
Strychnine, and salts of strychnine.	
Sugar of milk.	
Sulphur.	
Turmeric.	
Alum, alum sulphate.	
Ammonium chloride, or sal ammoniac, ammonium sulphate.	
Arsenic, and arsenates.	
Borax.	
Calcium carbide (tons), chloride, sulphate, sulphite, and bisulphite; chlorinated lime.	
Carbon bisulphide.	
Copper sulphate, or bluestone, oxide of copper.	
Iron sulphates.	
Magnesium sulphite, and bisulphite.	
Manganese oxides.	
Phosphorus.	
Potash (cwt.); pearlsh (cwt.); potash, caustic (cwt.), chlorate, cyanide (tons), nitrate (or salt-petre) (cwt.), permanganate, prussiates, sulphite, and bisulphite; metallic potassium.	
Salts of thorium, zirconium, or other rare metals, and solutions thereof, including mixtures of same, suited for the manufacture of incandescent mantles.	

SCHEDULE B—*continued*.Tariff Item
No.Preferential Surtax on
Foreign Goods
(Schedules C, D, and E).

Goods.

CLASS V.—DRUGS, ETC.—*continued*.Drugs and chemicals—*continued*.

Silver nitrate in crystals.

Soda acetate, crude; soda ash (cwt.); soda, arseniate, anhydrous carbonate (cwt.), caustic (cwt.), cyanide (tons), bisulphite, hyposulphite, silicate (cwt.), sulphate, sulphide, nitrate, per-
manganate.

Metallic sodium, sodium peroxide.

Zinc chloride.

(NOTE.—Mixtures of any of the articles enumerated under this Schedule as drugs and chemicals, with each other, or with chemicals, or substances not enumerated, shall, if not provided for elsewhere in the Tariff, be charged as medicinal preparations n.o.e., or chemicals n.o.e. under Schedule A, Class V.)

280 Drugs crude, not powdered, and unsuited for use as foods, or in the manufacture thereof—viz., barks, woods, twigs, leaves, herbs, flowers (except hops), roots, corms, gums, balsams, inspissated juices (except opium), seeds, fruits, fruit rinds, pitch, cantharides, ergot; also powdered pyrethrum flowers or Dalmatian powder, and powdered hellebore in bulk.

281 Essential oils, except eucalyptus; cod liver oil (gallons); oil of rhodium.

282 Horse, and cattle drenches.

283 Insecticides for agricultural uses, also tree washes.

284 Opium when entered to be warehoused in a manufacturing warehouse, for the purpose of making therein approved medicinal preparations.

285 Scrub exterminators.

286 Sheep dip; sheep drenches; sheep licks.

287 Surgical and dental instruments; also the following surgeons', physicians', dentists', and opticians' materials—viz., antiseptic dressings, gauzes, lint, tow, cotton wool, poroplastic felt, adhesive plaster, oiled silk or other fabric, spongio piline, bandages, catgut, and sterilized, and other sewings, thermometers; also appliances including splints for wear, peculiarly adapted to correct a deformity of the human body, to afford support to an abnormal condition of the human body, or to reduce or alleviate

such condition, or to substitute any part of such body; crutches; ear trumpets, ear tubes, and audiphones, for the partially deaf. Opticians' trial cases, lenses, and frames, spectacles, and magnifying glasses, ophthalmoscopes, optometers and other measuring instruments, test cards, and diagrams, artificial eyes (demonstration and other). Dentists' materials—viz., artificial teeth, tooth crowns, celluloid blanks, base plates, denture strengtheners, gutta-percha stick, points, pellets, and sheets, rubber dam, amadou absorbent, absorbent paper, rubber-sheets, metal-plate, -wire, -foil, sticks; solder; fusible metal, porcelain powder, and enamel, inlays, modelling composition and wax, investment compound, amalgam, and cement; also such other appliances and materials peculiar to surgical or dental use as may from time to time be enumerated in any order of the Minister.

Scientific and philosophical instruments and apparatus—namely, assay-balances; laboratory retorts, and laboratory flasks, and other instruments, and apparatus for chemical analysis, and assay works; assay furnaces, including dentists', and jewellers' furnaces; also such instruments, and apparatus, suited strictly for scientific and philosophical purposes, as may from time to time be approved by the Minister.

CLASS VI.—CLOTHING AND TEXTILES.

289	Brace-elastic, and brace-mountings.				
290	Brattice cloth made of jute or hessian.				
291	Bunting, in the piece.				
292	Butter cloth; also cheese cloth, and cheese bandages or caps ..	..	..	..	20% ad val.
293	Buttons, tapes, wadding, pins, needles.				
294	Cotton or linen piece-goods, and unions of the same, n.o.e., except imitation silks composed of any material or substance whatsoever.				
295	Fur skins, green or sun-dried.				
296	Gold or silver lace or braid for military clothing, feather-stitch braid.				
297	Hatmakers' materials—viz., felt hoods; shellac; galloons; calicoes; spale boards for hat boxes; leathers; silk plush in the piece; linings, when cut up or otherwise, under such conditions as the Minister may prescribe; blocks; frames; ventilators; tassels.				
298	Hessian, plain or striped, and scrim.				
299	Leather cloth, plain colours.				

SCHEDULE B—continued.

Tariff Item No.	Goods.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).
CLASS VI.—CLOTHING AND TEXTILES—continued.		
300	Minor articles (required in the making-up of apparel, boots, shoes, hats, caps, saddlery, umbrellas, parasols, and sunshades), enumerated in any order of the Minister, and published in the <i>Gazette</i> .	20 % ad val.
301	Ostrich feathers grown in New Zealand, when returned from abroad dressed, or dyed, upon evidence being produced to the satisfaction of a Collector of Customs as to their previous exportation.	
302	Sailcloth, canvas, and threads; angola mendings not exceeding 45 yards in length; crewel,	
303	Sewing cottons, silks, and threads; flourishing, embroidery, darning, knitting, and crochet threads, of silk, linen or cotton, or unions of the same, plain or fancy; macrame thread or macrame twine.	
304	Silk for flour dressing, in the piece.	
305	Silk twist (shoemakers', and saddlers').	
306	Staymakers' binding, eyelets, corset-fasteners, jean, ticks, lasting, sateen, and cotell; also corset shields, and busk protectors.	
307	Tailors' trimmings—viz., haircloth; plain or coloured imitation haircloth; canvas; buckram; vadding, and padding; silk, worsted, and cotton bindings, and braids; stay bindings; Russia braids; shoulder-pads; buckles; silesias; drab, slate, and brown jeans; pocketings; slate, black, and brown dyed unions and linens; Verona, and Italian cloth, of cotton or wool, or unions of the same; also such other lining materials as may be approved by the Minister.	
308	Tubular woven cotton cloth in the piece for meat-wraps	
309	Umbrella-makers' materials—viz., reversible, and levantine silk mixtures, gloria, and satin de chene, of not less than 44 in. in width; alpaca cloth, with border; zanella cloth, with border; also other piece-goods on such conditions as the Minister may approve; sticks, runners, notches, caps, ferrules, cups, ribs, stretchers, tips, and rings.	
310	Union textiles n.o.e., in the piece, the invoice value of which does not exceed 6d. the yard, when cut up, and made into shirts or pyjamas, under such conditions and regulations as the Minister may prescribe.	
311	Waterproof material in the piece, having within, or upon it, a coating of india-rubber.]	

CLASS VII.—LEATHER, AND ARTICLES USED IN LEATHER MANUFACTURES.

312	Boot elastic.	
313	Bootmakers' linings, canvas, plain, or coloured, bag and portmanteau linings, of such materials, qualities, and patterns, as may be approved by the Minister.	
314	Boots, shoes, shoettes, surdals, clogs, and pattens, slippers, and goloshes—namely, children's Nos. 0 to 6	10 % ad val.
315	Cork soles, and sock-soles; moulded shoe and slipper soles of rubber	10 % ad. val.
316	East India kip, also hides, crust of rough tanned, but undressed.	.. ..
317	Goat-skins, and kid-skins, however dressed.	.. ..
318	Grindery—namely, button fasteners, and staples; eyelets, and hook eyelets, and eyelet rings; tangles; spikes for running or crickeling shoes; boot-protectors; wood or rubber heels or knobs; leather toe-tips. "Wells" patent or a similar make, stiffeners or toes moulded ready for use, copper toes, boot stretchers and trees, hollow-fillers, japanned toe-tips; legging springs and stiffeners; lasting tacks, pegs, brass rivets, iron rivets; brass, iron, and copper cut-bills; steel points, sparrow bills; wrought, cut, and malleable hob-nails; Hungarian nails; wrought, and cut tip-nails; iron or wooden lasts; stands for lasts; sole, heel, stiffening, and toe-cap knives; shoemakers' wax; heel-balls; bristles, hemp, and flax; rubber solution or cement; wetting cut into strips or in coils ready for use; shoemakers' binding or beading; wetting leather cut into strips not exceeding 1 in. in width; webbing; tanners', curriers', and bootmakers' inks or stains; bootmakers' sectional cutting-boards; glass or emery paper, or cloth, on sheets, in rolls, or cut into shapes.	
319	Hog-skins.	
320	Kangaroo, and wallaby skins, undressed.	
321	Leather, japanned or enamelled.	
322	Saddle-trees.	
323	Saddlers' ironmongery (except bits and stirrup-irons), hames, and mounts for harness; straining, surcingle, brace, girth, and roller webs; collar check, and the same article plain, of such quality as may be approved by the Minister; legging-buckles, also metal articles required to repair or complete riding or driving harness, or saddlery, to be repaired or made in the Dominion.	
324	Tanning materials, crude.	
CLASS VIII.—FURNITURE, ETC.		
325	Blind webbing, and tape.	
326	Upholsterers' materials—viz., webbing, hair-seating, imitation hair-seating; curled hair; gimp, and cord, of wool, cotton, or silk; tufts, and studs; chair canvas.	

SCHEDULE B—continued.

Tariff Item No.	Goods.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).
	CLASS IX.—CHINA, GLASS, ETC.	
327	Bottles, empty, plain stone; also empty plain glass bottles, not being cut or ground; jars, plain glass; and plain earthen jars, up to 3 in. in diameter at the mouth.	
328	Earthen, or glass roofing tiles, ridging, or finials; also roofing slates (number).	
329	Glass plates (engraved) for photo-lithographic work.	
330	Jars, or other dutiable vessels, containing free goods, or goods subject to a fixed rate of duty, and being ordinary trade packages for the goods contained in them.	
331	Lamps, miners' safety, and glasses therefor; lamps peculiarly adapted for use on harbour beacons and lighthouses, also appliances peculiar to such lamps; side lights, and head lights, especially suited for the use of ships.	
	CLASS X.—FANCY GOODS, ETC.	
332	Action work, and keys, in frames, or otherwise, iron, or metal piano frames, for manufacture of organs, harmoniums, and pianos; organ pipes, and stop-knobs	
333	Articles, being exhibits for public display only in public museums, whether purchased under bond or directly imported by, or for presentation to such museums, upon declaration that such goods will not be sold or otherwise disposed of in New Zealand without payment of any duty which may be payable.	
334	Artists' materials—viz., canvases in the piece or on stretchers, oiled paper or drawing paper in sheets or blocks, colours, brushes, palettes, and palette knives	10% ad val.
335	Cigarette papers entered to be warehoused in any licensed tobacco manufactory for the manufacture therein of cigarettes	
336	Films for bioscopes, cinematographs, and kinetoscopes.	
337	Microscopes, and telescopes, and slides, for same.	
338	Paintings, statuary, and works of art, whether purchased under bond or directly imported by, or for presentation to any public institution or art association registered as a body corporate, for display in the buildings of such institution or association, and not to be sold or otherwise disposed of;	

339	statuary or works of art, whether purchased under bond, or directly imported, for display in any public park or place, on conditions prescribed by the Minister.	
340	Paintings or pictures painted or drawn by New Zealand students, within five years of the time of their departure from the Dominion for the purpose of undergoing a period of tuition abroad for the first time, upon evidence being produced to the satisfaction of a Collector of Customs	10% ad val.
341	Photographic cameras, and lenses, including focussing cloths, and camera covers	
342	Photographs of personal friends in letters or packets.	
343	Precious stones, cut or uncut, if unmounted.	10% ad val.
344	Sensitized surfaces, and albumenized paper, plain, not being post-cards or other stationery	
	Slides for magic lanterns.	
CLASS XI.—PAPER, ETC.		
	(NOTE.—In every case where exemption from duty is governed by a size, the equivalent area shall be exempt under like condition.)	
345	Bookbinders' materials—viz., cloth, leather, thread, headbands, webbing, end-papers, tacking-gut, marbling-colours, marble-paper, blue or red paste for ruling-ink, staple-presses, wire staples, staple-sticks.	
346	Butter paper (known as vegetable parchment paper), and waxed paper unprinted.	
347	(NOTE.—Butter paper or waxed paper, printed, shall be charged as wrapping paper, or wrappers, of all kinds, printed or lithographed. Schedule A, Class XI.)	
	Cardboard, pasteboard, wood-pulp board, and corrugated board, of size not less than that known as "royal" and weighing not less than 2 oz. per sheet of "royal" size; also strawboard of size not less than that known as "royal," and weighing not less than 3 oz. per sheet of "royal" size.	
348	Cardboard boxes, material for—viz., gold, and silver paper, plain or embossed; embossed paper in strips; gelatine or coloured papers; known as "box papers"	20% ad val.
349	Cartridge drawing paper.	
350	Celluloid, plain, in sheets, n.o.e.	
351	Cloth-lined boards, not less than "royal" size.	
352	Cloth-lined paper, and enamelled, gelatine, and metallic paper, of size not less than "demy"; also "ivorite" of size not less than "demy."	10% ad val.
353	Copy-books, having printed headlines on each page; also drawing-books	
354	Copying-paper, medium and larger sizes, in original mill wrappers and labels.	
355	Ink, printing	10% ad val.

SCHEDULE B—*continued*.

Tariff Item No.	Goods.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).
CLASS XI.—PAPER, ETC.— <i>continued</i> .		
356	Masticated para.	
357	Millboard, and bookbinders' leather board.	
358	Paper, hand-made or machine-made, book, or writing, when in original wrappers, of sizes not less than the size known as "demy," and not being a wrapping paper, or of the same quality as wrapping paper.	
359	Paper, printing	20% ad val.
360	Printed books, papers, and music, n.o.e., excepting advertising matter.	
361	Sunday school tickets, and reward cards, being Scriptural or religious motto cards, not exceeding 5d. per dozen invoice value, and not exceeding 6 in. by 4 in. in size, and having no reference upon them to Christmas, New Year, Easter, or birthdays.	
CLASS XII.—METALS.		
362	Agricultural machines, and agricultural implements, n.o.e.; also parts peculiar to the manufacture or repair of agricultural machines, and implements—including: chaff cutting knives, fittings for threshing mills, forgings or castings for ploughs, discs for harrows, mould-board plates, and steel-share plates cut to pattern, skeith-plates, tilt-rakes, reaper-knife sections or fingers, finished brass, and steel springs. (NOTE.—Agriculture as applied to the Tariff shall include horticulture and viticulture.)	
363	Anchors	10% ad val.
364	Artificers' tools, n.o.e., not including brushes or brushware; also the following tools—namely, axes, and hatchets, spades, shovels, forks, picks, mattocks, quartz, and knapping hammers, scythes, sheep-shears, reaping hooks, soldering irons, paperhangers' scissors, butchers' saws or cleavers; measuring bands or tapes; coal cutters, and air picks.	
365	Axles, axle-arms, and axle boxes.	
366	Bel lows nails.	

367	Bicycles and tricycles, fittings for—namely, rubber tires, pneumatic rubber tires, outside covers of rubber, and inner tubes, handle grips, pedal rubbers; also the following articles when not plated, japanned, enamelled, or varnished—namely, drop forgings, stampings, steel balls, weldless steel tubes with or without butted ends, wood or metal rims (not bored), spokes, forks, stays, handle bars, and seat pillars, unbuilt, bracket shells, fork, and stay ends, fork tips, bridges, crowns, and lugs; also ball heads complete when not brazed, including all plated parts. Hubs complete plated or otherwise, sprockets, chains, and chain-wheels, whether plated or not. Bottom brackets complete, including axles, cups, cranks, and pedals, plated or otherwise	20% ad val. (except rubber tires, pneumatic rubber tires, outside covers of rubber, and inner tubes).
368	Beekeepers' tools, implements, and apparatus—namely, metal fittings for bee hives, bee smokers, wax extractors, rubber gloves, gloves of textile soaked in oil, queen cages, comb foundation, foundation machines, honey knives, honey extractors, queen rearing outfits, wax presses, tools peculiar to the use of beekeepers.	10% ad val.
369	Blacksmiths' anvils, forges, and fans	10% ad val.
370	Bolts, and bolt ends, up to 24 in. in length; nuts, blank or screwed nuts, black or finished nuts.	10% ad val.
371	Brass, copper, and tin, in pigs, bars, or sheets; also tinned hoops.	20% ad val.
372	Brass or metal tubing, and stamped work, in the rough.	10% ad val.
373	Caps, percussion	10% ad val.
374	Card clothing, for woolen-mills, and for paper-mills.	20% ad val.
375	Castings for ships; also propeller-screws, including only bosses and blades	10% ad val.
376	Chains, iron, plain, or with hook, swivel, or ring, attached	20% ad val.
377	Copper, brass, and composition rod, bolt, sheathing, and nails.	10% ad val.
378	Couch-roll jackets, machine wires, beater-bars, and strainer-plates, for paper-mills.	10% ad val.
379	Crucibles.	10% ad val.
380	Electrical materials—namely, insulated cable and wire, carbon in block, sheet, or rod, arc lamp carbons; mica, vulcanite, and other insulating material, rubber or gutta-percha solutions, insulating tape.	10% ad val.
381	Electricians' portable testing sets.	10% ad val.
382	Emery grinding machines, and emery wheels.	10% ad val.
383	Empty iron drums, not exceeding 10 gallons capacity.	10% ad val.
384	Engineers', and all metal- or wood- or stone-workers' machine tools or hand tools, not including brushes or brushware.	10% ad val.
385	Engine-governors..	10% ad val.
386	Eyelets.	10% ad val.
387	Fire-engines (number), chemical fire-engines (number), and chemical fire-extinguishers (number); also fire-hose and couplings therefor, portable fire-escapes, fire-ladders, fire-reels, and firemen's helmets, if declared, to the satisfaction of the Collector, for the use of a fire brigade	10% ad val.

SCHEDULE B—continued.

Tariff Item No.	Goods.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).
CLASS XII.—METALS—continued.		
388	Fish-hooks, unmounted, and without attachments.	
389	Galvanizing baths, welded.	
390	Gas engines, and hammers, and oil engines	20% ad val.
391	Glassmakers' moulds.	
392	Hydraulic wheel presses.	
393	Iron boiler-plates and unflanged end-plates for boilers; boiler-tubes not exceeding 6 in. in internal diameter and unflanged; expansion-rings; furnace-flues	20% ad val.
394	Iron pipes wrought, and wood or fibre pipes, not exceeding 6 in. in internal diameter, also knees, bends, elbows, and other fittings for the same. Cast iron pipes not exceeding 9 in. in internal diameter, also knees, bends, elbows, and other fittings for the same. Wrought iron boring, casing, and lining tubes, for oil boring, mining, or well sinking purposes	20% ad val.
395	Iron, plain black—viz., sheet, plate, hoop, rod, bolt, bar, angle, tee channel; pig iron; plain iron rolled girders, rolled chequered plates; shafting, plain rolled or plain turned, but otherwise unwrought	20% ad val. (except hoop 6 in. in width or over, and pig iron). 20% ad val.
396	Iron and steel cordage	
397	Lead, in pigs and bars.	
398	Locomotive wheels and tires, including wheels and tires for railway or tramway passenger cars; coil, spiral, and volute springs, suited for the manufacture of locomotives; automatic air-pressure brakes specially suited for use on railway carriages and wagons.	
399	Machine saw-blades.	
400	Machinery—viz., dairying machinery (including cream-separating machines, also coolers); also vacuum pumps for milking machines when imported along with the machines to which they belong	10% ad val. (excluding cream-separating machines, coolers, and vacuum pumps when imported along with the machines to which they belong).

401	Machinery, mining, and gold saving; also, briquette making, and coal washing machines, rock-breaking machines, trommels, stamper batteries, ore feeders, grizzly bars, steel shoes and dies, ore crushing rolls, ball mills, grinding pans, tube mills, concentrators and rubber endless belts for same, battery screening woven or punched; also, the following machines, materials, and appliances, when imported for mining purposes, namely:— Air compressors, not including the motive power for charging the same Chain links and rollers for conveyors, and conveyor belts of rubber or fibre Electric exploders Fans for mine ventilation Filter presses Fuel-economizers Sand pumps Sinking pumps Solution pumps made wholly of metal Steam pumps having a capacity exceeding 5,000 gallons per hour Turbine pumps Shaft signalling gear Steel or iron head frames for mining shafts Battery blanket not exceeding 3 ft. wide Material for filter cloths and plush or other cloth for gold saving	10% ad val. (except concentrators and rubber endless belts for same).
402	Medals, including only old or second-hand war medals, humane societies', and other similar medals; also old coins.	10% ad val.
403	Metal fittings, for trunks, portmanteaux, travelling bags, leggings, bags, and satchels.	10% ad val.
404	Metal sheaves, grooved metal pulleys	10% ad val.
405	Metal tubes in the rough, having a slit through their whole length, suited for the manufacture of fenders, bedsteads, gates, and the like articles.	10% ad val.
406	Metal wire of all kinds, plain (tons); metal cordage n.o.e., not being gold or silver (cwt.); also barbed fencing wire (tons), and fencing-staples (cwt.).	10% ad val.
407	Metal wove-wire, and metal gauze; also wire netting, and expanded metal lathing or fencing, in the piece	10% ad val.
408	Metallic capsules	20% ad val.
409	Meters, gas, or electricity, being household supply meters.	20% ad val.
410	Meters, water.	20% ad val.
411	Motor engines for bicycles	20% ad val.

SCHEDULE B—*continued*.

Tariff Item No.	Goods.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).
CLASS XII.—METALS—<i>continued</i>.		
412	Moulders' chaplets and dowels.	
413	Perambulators, and the like vehicles, fittings for, n.o.e.	
414	Perforated or cellular sheet zinc or iron	10% ad val.
415	Portable engines on four or any greater number of wheels, with boiler of locomotive type; also traction engines	10% ad val.
416	Printing type, and printing materials, n.o.e., suited only for the use of printers	10% ad val.
417	Rails for railways and tramways, including lay-outs, and points, and crossings, for the same; also fish plates	20% ad val.
418	Rivets, and washers.	
419	Rock drills, diamond drills, and drill sharpeners.	
420	Set screws, engineers' studs, and split pins.	
421	Sewing, knitting, and kilting machines.	
422	Spray pumps, not being syringes.	
423	Steam or hydraulic pressure, and vacuum gauges; pressure indicators or pressure gauges for gas or oil engines; speed indicators, engineers', for testing machinery	10% ad val.
424	Surveyors' instruments—viz., steel bands, chains, measuring tapes, field instruments, and drawing instruments; draughtsmen's drawing instruments	10% ad val.
425	Tacks, and nails, 1 in. and under.	
426	Tea packing lead.	
427	Tinsmiths' fittings, and furniture, including stamped or blocked tin or copper, planished or unplished.	
428	Welded and flanged boiler furnaces, plain or corrugated	
429	Zinc, plain sheet.	10% ad val.
430	Zinc plates or copper plates for photo-lithographic work.	

CLASS XIII.—TIMBER, ETC.

- 431 Ash, hickory, lancewood, and beechwood timber, unwrought.
 432 Blacksmiths', braziers', assay, and treadle power bellows.
 433 Carriage or cart makers' materials—viz., shafts, spokes, and felloes, in the rough; hubs, all kinds; poles if unbent and unplanned, all kinds; bent wheel rims.
 434 Chassis for motor vehicles, whether attached or unattached to such vehicles, including wheels therefor.
 435 Churns.
 436 Lignum-vitæ.
 437 Material for the manufacture of carriages, carts, drays, and wagons, motor vehicles, and railway cars or wagons—viz., springs, truck pedestals, mountings, trimmings, hinges, tire bolts, shackle holders, step treads, rubber cloth, rubber tires, pneumatic rubber tires, outer covers of rubber, inner tubes; also, iron or metal fittings (except steps, lamp irons, dash irons, seat rails, and fifth wheels) for the manufacture of carriages, carts, drays, and motor vehicles (other than motor bicycles or railway or tramway cars or wagons).
 438 Sieves, hair.
 439 Wooden handles for tools.

CLASS XIV.—OILS, ETC.

- 440 Oils in vessels capable of containing one gallon of oil or more—viz., refined mineral oils not exceeding in specific gravity 0.870 at 60° F.; fish, penguin, mutton bird, seal, and whale oils.

(NOTE.—Mixtures of mineral or vegetable oils, with each other, or with fish, penguin, mutton bird, seal, whale, or other oils, shall be charged with duty (1) if imported in vessels capable of containing one gallon of oil or more, as oil n.o.e., including mineral lubricating oil, Class XIV, Schedule A; (2) if imported in vessels having a lesser capacity than one gallon, 20 per cent. ad val.)

10% ad val.

- 441 Paints, and colours, n.o.e.
 442 Turpentine; turpentine substitute composed of volatile mineral oils, or of volatile mineral oils in combination with turpentine, or other volatile vegetable oils; liquid driers; terebene.
 443 Wood naphtha.

CLASS XV.—AGRICULTURAL FARM PRODUCTS, ETC.

- 444 Linseed.

SCHEDULE B—continued.

Tariff Item No.	Goods.	Preferential Surtax on Foreign Goods (Schedules C, D, and E).
CLASS XVI.—MISCELLANEOUS.		
445	Apparatus, appliances, articles, and materials, for educational purposes, as may be approved by the Minister, and under conditions prescribed by him.	
446	Bagging, bags, or sacks, of jute or hessian; also cornsacks; bags made of New Zealand tow or flax.	
447	Belting, for driving machinery, other than leather belting and not being cordage or rope	10% ad val.
448	Binder-twine	10% ad val.
449	Bricks other than firebricks.	
450	Candle-nuts, and candle-nut kernels.	
451	Candle-wick.	
452	Canvas aprons and elevators, for reapers and binders.	
453	Canvas, indiarubber, or other hose, tubing, or piping, armoured or otherwise; flexible metal hose, tubing, or piping	20% ad val.
454	Charts and maps.	
455	Confectioners' moulding starch.	
456	Cork, cut; bungs; fishermen's cork floats; also plain unornamental stoppers of every description for bottles, jars, and casks	10% ad val.
457	Cotton and other waste, engineers.	
458	Diving dresses, and dresses suited solely for use in poisonous gases or smoke, with apparatus peculiar thereto.	
459	Dyes; dye stuffs; and dyeing materials, crude.	
460	Engine packing.	
461	Felt sheathing	10% ad val.
462	Gum boots, half-knee, knee, or thigh, the soles of which may be of either leather or rubber.	
463	Hawfers of 12 in. or over.	
464	Honey and brown Windsor soap composition.	
465	Indiarubber gloves.	
466	Manures.	

- 467 Marble, granite, and other stone, hewn or rough sawn, not dressed or polished.
 468 Netmakers' cotton twine; nets, seine fishing.
 469 Official supplies for consular officers of countries where a similar exemption exists in favour of British consuls.
 470 Paper-makers' felts.
 471 Passengers' baggage and effects, including only wearing apparel and other personal effects that have been worn or are in use by persons arriving in the Dominion; also implements, instruments, and tools of trade, occupation, or employment, of such persons, not exceeding £50 in value, and household or other effects not exceeding £100 in value, which have been in use for twelve months prior to embarkation by the persons or families bringing them to the Dominion, and which are not intended for any other person or persons, or for sale; also cabin furnishings belonging to such persons not exceeding in value £10:
 Provided that goods falling within the above exemption may be admitted free, only, if imported within two years of the arrival in the Dominion of the persons or families by whom they have been used.
- 472 Plaster of Paris.
 473 Powder—viz., blasting powder, and blasting meal.
 474 Returned empties which are identified as such to the satisfaction of a Collector of Customs.
 475 Shipbuilders' models of vessels suited only for exhibition.
 476 Ship chandlery, n.o.e.
 477 Ships' rockets, blue-lights, and danger-signals, and rocket life-saving apparatus.
 478 Stones, mill, grind, oil, and whet.
 479 Tobacco for sheep-wash, or for insecticide, after being rendered unfit for human consumption to the satisfaction of the Minister.
 480 Treacle or molasses, mixed with bone-black in proportions to the satisfaction of the Minister.
 481 Typewriters.
 482 Wax, bottling.
 483 Wool packs and wool pockets.
 484 Yarn—viz., coir, flax, jute, and hemp.
 485 Articles and materials (as may from time to time be specified by the Minister) which are suited only for, and are to be used solely in, the fabrication or repair of goods within the Dominion. All decisions of the Minister in reference to articles so admitted free to be published from time to time in the *Gazette*.
 All articles n.o.e.
 Provided that all goods falling under this Schedule, which are prison made, shall be charged an ad val. duty of 20 per cent.*

* By Order in Council, dated 27th July, 1908, the importation into New Zealand of goods manufactured or produced wholly or in part by prison labour, is prohibited.

TABLE OF DUTIES, UNDER THE NEW ZEALAND AND SOUTH AFRICAN CUSTOMS DUTIES RECIPROCITY ACTS, CHARGEABLE ON GOODS BEING THE PRODUCE OR MANUFACTURE OF AND BEING IMPORTED FROM THE COLONY OF THE CAPE OF GOOD HOPE, THE COLONY OF NATAL, THE ORANGE RIVER COLONY, THE TRANSVAAL, AND SOUTHERN RHODESIA.*

Item No.	Goods.	Rate of Duty.
487	Feathers	15% ad val.
488	Fish	1 ³ d. the lb.
489	Fruits, dried	Free.
490	Fruits, green	Free.
491	Maize	6d. per cental.
492	Sugar	Free.
493	Tobacco (manufactured)	2s. 6d. per lb.
494	Tea (not otherwise exempt)	1d. per lb.
495	Wines (other than sparkling)	2s. per gallon.
496	Wines (sparkling)	5s. per gallon.
497	All other goods (except spirits), 3 per cent. less than the duty which would otherwise be payable.	.. .. .
TABLE OF EXCISE DUTIES.		
498	Tobacco.. .. .	1s. per lb.
499	Cigars and snuff	1s. 6d. per lb.
500	Cigarettes— If manufactured by machinery	2s. 6d. per lb.
	If made by hand	1s. the lb.
501	Beer	3d. the gallon.
502	Articles in which spirit is a necessary ingredient, manufactured in a warehouse appointed under section 26 of the Customs Laws Consolidation Act, 1882, namely— Perfumed spirit	20s. the liquid gallon.
	Toilet preparations which are subject to 16s. the liquid gallon on importation	12s. the liquid gallon.
	Toilet preparations which are subject to 25 per cent. duty on importation	6s. the liquid gallon.
	Culinary and flavouring essences	12s. the liquid gallon.
	Medicinal preparations (excepting medicated wine or wine mixed with food) containing more than 50 per cent. of proof spirit	9d. the lb.
	Medicinal preparations (excepting medicated wine or wine mixed with food) containing 50 per cent. of proof spirit or less	Free.

* No higher duty shall be levied on any goods the produce or manufacture of the said colonies than that which would be levied under the Customs Duties Act, 1908, on the same goods if they were the produce and manufacture of some other part of the British Dominions (See the Customs Duties Act, 1908, section 8.)

Tariff
Item
No.

EXTRACT FROM THE CUSTOMS DUTIES ACT, 1908.

- 503 "7. Where any dispute arises as to the true meaning and application of certain terms used in the Tariff, the Minister may determine such dispute in such manner as appears to him just, and his decision thereon shall be final."

EXTRACT FROM THE DEFENCE ACT, 1908.

- 504 "156. All military clothing, saddlery, and equipments imported into New Zealand for the *bona fide* use of a Volunteer corps or of an officer of the Defence Forces shall, on the certificate in writing of the Minister that the same are or have been imported for such purpose, be admitted free of duty."

EXTRACT FROM THE FRIENDLY SOCIETIES ACT, 1908.

- 505 "37. (2.) Customs duties shall not be chargeable on regalia, emblems, certificates, and banners, the property of any society or registered branch."

DUTIES AND EXEMPTIONS FROM DUTY CREATED BY HIS EXCELLENCY THE GOVERNOR.

The following foods, being infants' and invalids' foods, viz. :—

506	Allenbury's Foods Nos. 1, 2, and 3	..	..	..
507	Allenbury's Pancreatized Milk and Cereal Diet	..	..	..
508	Allinson's Food	..	..	..
509	Benger's Food	..	..	..
510	Burroughs Wellcome and Co.'s Peptogenic Milk Powder	..	..	..
511	Carnrick's Soluble Food	..	..	..
512	Chapman's Food	..	..	..
513	Du Barry's Revalenta Arabica	..	..	..
514	Frame Food Diet	..	..	..
515	Gluten Flour	..	..	..
516	Hewlett's Food	..	..	..
517	Horlick's Malted Milk	..	..	..
518	Maltico Food	..	..	..
519	Mellin's Food	..	..	..
520	Moseley's Food	..	..	..
521	Neave's Food	..	..	..
522	Nestle's Milk Food	..	..	..
523	Nestle's Milo Food	..	..	..
524	Ridge's Food	..	..	..
525	Savory and Moore's Food	..	..	..
526	Food composed of pasteurized milk or casein of milk in combination with malted or unmalted ground grain	..	..	..

} Free.

Tariff
Item
No.

527	Dextro levulose, or invert sugar..	..	..	..
528	Grape-sugar ..	..	..	..
529	Saccharum ..	..	..	..
530	Sacchosoline ..	..	..	..
531	Glucose obtained from other sources than starch ..	..	..	..
532	Winding engines for mining purposes driven by hydraulic power (including bed plates, foundation bolts, and friction clutches, when imported with the engines), ordinary tariff, 5 per cent. <i>ad val.</i> ; preferential surtax, 10 per cent. <i>ad val.</i>			
533	Cotton, linen, and union piece - goods having patterns or woven devices or other signs which indicate that they are to be cut up into separate articles, 20 per cent. <i>ad val.</i>			
534	Creep-clips, tie-irons, bearing brackets, and bed-plates being rail-fastenings, free; preferential surtax 20 per cent. <i>ad val.</i>			
535	Sanitas malted nuts, free.			
536	Machines for bevelling and cutting glass, free.			
537	Bevelled or silvered glass, other than plate glass, ordinary tariff, 25 per cent. <i>ad val.</i> ; preferential surtax, 12½ per cent. <i>ad val.</i>			
538	Compo-board, 4s. per one hundred superficial feet.			
539	Straight air-pressure brakes, especially suited for use on railway or tramway carriages, free.			
540	Belting of cotton, jute, or woven fibre, with a backing or edging of leather, 2d. per lb., provided that the weight of the leather included therein does not exceed one-half.			

MODIFICATIONS.

The Customs tariff is modified in respect of the undermentioned articles imported into the Cook and other Islands within the extended boundaries of the Dominion:—

Claret, 2s. the gallon.

Horses, 10s. each.

Drugs imported by missionary societies for dispensation among the Natives, free.

The Customs Duties Act, 1908, provides that there shall be levied and collected in the said Islands, in addition to all other duties imposed by the Act, the following, viz.:—

Sugar, whether imported from New Zealand or elsewhere, ½d. per lb.

Cotton piece-goods (except calico), linen piece-goods, and piece-goods of mixed cotton and linen, whether imported from New Zealand proper or elsewhere, 10 per cent. *ad valorem*.

OPIUM PROHIBITION.

The Opium Act, 1908, makes it unlawful for any person to import opium into the Dominion in any form suitable for smoking. Permits may be issued by the Minister of Customs for the importation of the drug in certain forms.

No permit shall be issued to any person of the Chinese race. Heavy penalties are prescribed for breaches of the above law.

The Act makes it illegal to have opium in possession, except the kinds which can be held under permit, and requires that every person who purchases opium from the holder of a permit shall enter or cause to be entered in a book kept for such purpose the particulars of all purchases in the same manner as the holder of a permit is required to enter particulars of all sales.

An Order in Council dated 2nd February, 1909, issued under authority of section 93 of the Customs Law Act, 1908, prohibits the importation into New Zealand of any fluid preparation of opium containing a greater quantity of extractive matter than tincture of opium prepared according to the Pharmacopœia of the United States of America.

TIMBER EXPORT.

The Timber Export Act, 1908, provides that the Governor may from time to time, by Order in Council, cause to be levied, previous to exportation from New Zealand, the following duties upon timber:—

Logs, round	5s. per	} Or such lesser duty as the Governor by Order in Council determines.
Logs, squared with axe or saw	100 superficial feet.	
Half logs		
Flitches of any particular kind, or pieces of such size as the Governor by Order in Council from time to time determines	3s. per 100 superficial feet.	} Or such lesser duty as the Governor by Order in Council determines.

Orders in Council dated 6th October, 1908, and 17th December, 1908, direct that the following duties shall be levied, collected, and paid:—

ON WHITE-PINE OR KAHIKATEA TIMBERS.

Logs, round	5s. per 100 superficial feet.
Logs, cut in half	5s. „ „
Logs, squared with axe or saw, 10 in. by 10 in., or its equivalent or over	5s. „ „
Flitches, exceeding 12 in. in width and 4 in. in thickness or its equivalent, and less than the equivalent of 10 in. in width and 10 in. in thickness	3s. „ „

Provided that no duty shall be levied on flitches unless they exceed 4 in. in thickness.

ON KAURI TIMBER.

Logs, round	5s. per 100 superficial feet.
Logs, cut in half	5s. „ „
Logs, squared with axe or saw	5s. „ „
Flitches exceeding 30 in. in width and 9 in. in thickness, or its equivalent	3s. „ „

THE NEW ZEALAND AND SOUTH AFRICAN CUSTOMS DUTIES RECIPROCITY.

By treaty with the Colonies of the Cape of Good Hope, Natal, Orange River, Transvaal, and Southern Rhodesia the existing New Zealand Customs tariff is altered in respect of importations from the above colonies into New Zealand, and on and after the 1st January, 1907, the following duties shall be levied* :—

Feathers	..	..	..	..	15 per cent. ad valorem.
Fish	..	..	..	..	1½d. per lb.
Fruits, dried	..	..	..	..	Free.
Fruits, green	..	..	..	..	Free.
Maize	..	..	..	..	6d. per cental.
Sugar	..	..	..	..	Free.
Tobacco (manufactured)	..	..	..	..	2s. 6d. per lb.
Tea (not otherwise exempt)	..	..	..	..	1d. per lb.
Wines (other than sparkling)	..	..	..	..	2s. per gallon.
Wines (sparkling)	..	..	..	..	5s. per gallon.
All other goods (except spirits)	..	..	..	..	3 per cent. less than the duty which would otherwise be payable.

The following duties are chargeable under the treaty on New Zealand goods imported into the above colonies of South Africa :—

Bran	..	..	..	..	1s. per cental.
Flour	..	..	..	..	2s. 3d. per cental.
Oats	..	..	..	..	1s. 10d. per cental.
Wheat	..	..	..	..	1s. per cental.
Butter	..	..	..	..	2d. per lb.
Cheese	..	..	..	..	12 per cent. ad valorem.
Meats	..	..	..	..	1d. per lb.
All other goods (except spirits)	..	..	..	..	3 per cent. less than the duty which would otherwise be payable.

It is also agreed that if a fiscal difference is made by either of the contracting parties between locally manufactured spirits and imported spirits, the manufactured spirits of the other contracting party shall be admitted at the same rate of duty as is payable on the locally manufactured spirits.

The above treaty continues in full force and effect until terminated by the Governor by Order in Council gazetted.

* No higher duty shall be levied on any goods the produce and manufacture of the said colonies than that which would be levied under the Customs Duties Act, 1908, on the same goods if they were the produce or manufacture of some other part of the British dominions (see the Customs Duties Act, 1908, sec. 8).

COMMERCE—*continued.*

SECTION VIII.—EXPORTS.

THE quantities and values of exports used in making up the figures given in this portion of the statistical information are obtained from Customs entries. In estimating the value of goods exported the “free on board in New Zealand” value is given, and, as regards the main items, the Collector of Customs examines carefully the amounts stated, and compares them with current price-lists, to prevent any overestimate. As a further safeguard, the values of wool, frozen meat, oats, wheat, tallow, phormium fibre, butter, and cheese are submitted to the various Chambers of Commerce for their approval prior to the publication of the figures. Goods transhipped are regarded as destined for the country where it is intended to land them.

The value of all the exports in 1910, inclusive of specie (£27,736), was £22,180,209. The value of New Zealand produce exported, £21,944,963, gives an average of £22 2s. 1d. per head of population, against £20 0s. 7d. for 1909.

The average annual value of domestic products exported during each quinquennial period since 1853, and the average value per head of population is shown below together with the values for 1908, 1909, and 1910.

Quinquennial Period.	Exports of New Zealand Produce.	
	Average	Average
	Total Value. £	Value per Head. £ s. d.
1853-57	335,571	8 11 11
1858-62	1,040,330	11 18 10
1863-67	3,754,500	19 15 5
1868-72	4,636,374	18 8 4
1873-77	5,530,715	15 3 8
1878-82	5,893,195	12 5 7
1883-87	6,665,481	11 12 0
1888-92	8,898,372	14 4 0
1893-97	8,961,269	12 16 0
1898-1902	12,273,807	15 17 8
1903-7	16,513,399	18 14 5
1908	15,894,530	16 16 4
1909	19,462,936	20 0 7
1910	21,944,963	22 2 1

Exports from the North and South Islands.

The exports from the North and South Islands respectively, excluding “Parcels-post,” during the last five years were as under:—

Year.	North Island.	South Island.	Proportion to Total Export.	
	£	£	North Island.	South Island.
1906 ..	10,438,311	7,635,286	57·75	42·25
1907 ..	12,204,901	7,836,661	60·90	39·10
1908 ..	9,958,025	6,322,360	61·17	38·83
1909 ..	11,943,810	7,685,115	60·85	39·15
1910 ..	13,651,659	8,493,360	61·65	38·35

Exports from Different Ports, &c.

The following table shows the average yearly value of exports from each port in the Dominion during each quinquennial period from 1893 to 1907, and for the year 1910. The ports are arranged in order of magnitude for the latter year.

Ports.	Yearly Average of Quinquennial Periods.			Year.
	1893-97.	1898-1902.	1903-7.	1910.
	£	£	£	£
Wellington	1,363,157	2,128,198	3,176,052	4,530,923
Auckland	1,275,413	1,923,785	2,859,874	3,960,655
Lyttelton	1,773,131	2,328,148	2,592,105	3,154,471
Napier	937,662	903,377	1,253,538	1,885,939
Dunedin	1,064,016	1,352,535	1,501,750	1,564,773
Invercargill and Bluff	662,826	813,436	931,776	1,338,825
Timaru	519,388	741,510	1,033,217	1,290,451
Poverty Bay	234,793	371,745	732,123	1,189,263
New Plymouth		365,789	452,388	620,785
Waitara	161,902	85,847	162,984	332,913
Patea	41,869	85,349	347,886	586,729
Wanganui	284,126	333,842	402,263	401,655
Greymouth	229,764	324,512	403,821	386,030
Wairau and Picton	137,452	139,700	252,434	305,459
Oamaru	266,259	230,497	258,530	211,982
Nelson	64,785	66,985	87,065	150,397
Kaipara	80,008	140,734	143,979	142,797
Westport	37,507	56,371	65,135	66,481
Hokitika	80,207	40,546	36,612	33,491

The grouping of Invercargill with Bluff, and Wairau with Picton, is unavoidable as the returns furnished by the Customs do not, in those cases, distinguish each port separately.

Exports to Different Countries.

The values of exports for the years 1900 and 1910 to the United Kingdom, the Australian States, with other British possessions, and to foreign countries, show the extent and development of outward trade in regard to its distribution, considered for such period:—

Countries.	1900.	1910.
	£	£
United Kingdom	10,259,342	18,633,118
New South Wales	1,192,570	1,067,794
Victoria	514,231	874,471
Queensland	35,348	9,399
Western Australia	59,891	11,151
South Australia	28,899	29,068
Tasmania	27,643	18,868
Other British possessions	474,198	457,368
United States	458,796	553,603
Germany	24,186	205,931
Other foreign ports	171,057	319,438
	£13,246,161	£22,180,209

Comparing the first five years with the second half of the period shown below, it is found that there has been an increase of 45·31 per cent. in the value of exports to the United Kingdom, of 21·56 per cent. to foreign countries, and a decrease of 6·82 per cent. to British possessions.

Year.	Exports to		
	United Kingdom.	British Colonies and Possessions.	Foreign States.
	£	£	£
1901	9,295,375	2,907,412	678,637
1902	9,450,648	3,577,815	616,514
1903	11,345,075	2,821,608	843,695
1904	11,876,273	2,088,691	783,384
1905	12,087,818	2,591,802	976,327
1906	14,047,176	3,141,327	906,634
1907	16,533,493	2,559,631	975,833
1908	13,143,780	2,414,521	759,193
1909	16,193,188	2,449,691	1,019,117
1910	18,633,118	2,468,119	1,078,972

The following are the values of exports to different countries or places in 1910 and 1909, arranged in order of magnitude of increase or decrease:—

Country.	1910. £	1909. £	Increase in 1910. £
United Kingdom	18,633,118	16,193,188	2,439,930
Germany	205,931	77,969	127,962
Victoria	874,471	783,277	91,196
Fiji	88,331	69,021	19,310
Friendly Islands	99,334	83,134	16,200
New South Wales	1,067,794	1,052,371	15,423
Belgium	25,398	10,950	14,448
Uruguay	15,401	4,376	11,025
Hong Kong	16,822	10,113	6,709
Society Islands	44,986	39,313	5,673
Switzerland	4,790	63	4,727
Argentine Republic	3,420	66	3,354
Austria-Hungary	3,119	152	2,967
Denmark	3,385	489	2,896
Chili	2,154	92	2,062
Marshall Island	1,550	..	1,550
Gibraltar	9,780	8,257	1,523
China	2,805	1,284	1,521
Bombay	959	74	885
Russia	1,998	1,117	881
Italy	879	19	860
Transvaal	1,011	173	838
Guam	679	..	679
Malta	799	168	631
Sweden	799	222	577
New Caledonia	2,277	1,745	532
Japan	647	130	517
Portuguese (East Africa)	370	..	370
Caroline Islands	2,723	2,419	304
Solomon Islands	1,371	1,070	301
Banks Island.. ..	521	348	173
New Hebrides	2,255	2,119	136
Burmah	128	10	118

Country.	1910. £	1909. £	Increase in 1910. £
Rhodesia	110	31	79
Java	57	5	52
Torres Island	60	29	31
Mexico	14	7	7
Peru	6	1	5
Agra and Oudh	5	..	5
Federated Malay States	5	..	5
Syria	6	3	3
Mauritius	4	2	2
Persia	1	..	1
Norway	27	26	1
Roumania	1	..	1
West Indies (Foreign)	1	1	..

Country.	1910. £	1909. £	Decrease in 1910. £
United States of America	553,603	684,810	131,207
Natal	16,770	61,512	45,742
Cape Colony	27,765	60,229	32,464
Canada	160,842	180,975	20,133
South Australia	29,068	35,813	6,745
Ceylon	129,119	134,570	5,451
Western Australia	11,151	14,314	3,163
Sandwich Islands	301	3,235	2,934
Tasmania	18,868	21,291	2,423
Queensland	9,399	11,049	1,650
Navigator Islands	48,606	50,221	1,615
Philippine Islands	492	1,625	1,133
France	46,528	47,454	926
Madras	342	1,120	778
Brazil	600	1,269	669
Bismarch Archipelago	1,597	2,077	480
Malden Island	119	511	392
Surprise Islands	495	848	353
Bengal	2,080	2,389	309
Holland	240	462	222
Christmas Island	..	137	137
Norfolk Island	1,592	1,714	122
New Guinea	123	185	62
British East Africa	7	47	40
Fanning Island	3	37	34
British West Indies	4	30	26
British Guiana	..	12	12
Orange River Colony	9	17	8
Turkey	..	7	7
Egypt	3	9	6
Sumatra	..	3	3
Azores	..	2	2
Straits Settlements	17	19	2
Penang	8	9	1
Singapore	156	157	1
Cyprus	..	1	1
Reefs Island	..	1	1
Bolivia	..	1	1

PRINCIPAL ARTICLES EXPORTED TO BRITISH COUNTRIES.

United Kingdom.—Apparel and slops, £3,460; bacon and hams, £2,147; books, &c., printed, £3,707; bran, £3,154; butter, £1,750,256; carriages, &c.—motor cars and cycles, £1,063; cheese, £1,187,181; coals, £180,649; copra, £41,158; fruits, fresh, £1,391; glycerine, crude, £1,702; gold, £996,081; grain and pulse, £284,974; gum, kauri, £151,319; hair, £4,471; hides, £5,752; honey, £1,625; hops, £5,370; indiarubber and gutta-percha goods, £1,233; indiarubber, old, £1,735; jewellery, £1,264; jewellers' sweeping, £1,781; lard, £4,564; leather, £20,117; machinery and machines, £6,297; meats, frozen—beef, £592,114; kidneys, £15,729; lamb, £1,878,796; mutton, £1,192,920; mutton joints, £58,629; pork, £20,736; rabbits, frozen in the skins, £70,049; salted beef, £3,695; meat, potted and preserved, £75,955; meat-extract, £7,550; manufactures of metal, £4,757; metal, old, £5,954; milk, preserved, £4,409; phormium fibre, £341,109; tow, £25,994; plate and platedware, £1,790; rags, £1,982; sausage-skins, £75,497; seeds, grass and clover, £68,998; silver, £43,090; skins—calf, &c., £4,053; rabbit, £131,690; sheep, with wool, £188,118; sheep, without wool, £393,088; tallow, £643,087; mutton-stock and oleomargarine, £110,309; timber, £62,543; twine-binder, £1,242; whalebone, £1,010; wool—greasy, £6,338,498; scoured, £759,951; slipe, £772,915; washed, £19,479.

Victoria.—Animals—horses, £79,010; sheep, £1,432; books, &c., printed, £2,154; bran, £2,923; coals, £6,424; drugs, chemicals, and druggists' wares, £1,264; fish, frozen, £8,830; fish, potted and preserved, £1,877; glass, broken, £1,152; gold, £409,461; grain and pulse, £14,057; gum, kauri, £2,283; hides, £83,544; hops, £3,564; indiarubber, old, £2,773; leather, £1,981; linseed, £1,062; machinery and machines, £7,006; meats, potted and preserved, £4,583; metal, old, £1,137; oysters, £2,203; phormium fibre, £55,252; tow, £4,143; rugs, £1,296; sausage-skins, £1,064; seeds, grass, and clover, £17,331; skins, calf and other kinds, £1,774; sheep-skins without wool, £3,032; pumice stone, £1,209; tallow, £2,470; timber, £124,294; wool, greasy, £2,935.

New South Wales.—Animals—horses, £78,547; sheep, £5,725; books, &c., printed, £2,104; butter, £2,808; carriages, &c.—motor cars and cycles, £3,368; cheese, £1,192; coals, £30,410; drugs, chemicals, and druggists' wares, £2,765; fancy goods and toys, £5,700; fish, frozen, £4,329; fish, potted and preserved, £2,875; fungus, £3,151; gold, £490,911; grain and pulse, £13,669; gum, kauri, £2,161; hair, £2,008; hides, £49,426; hops, £9,634; horns and hoofs, £2,602; instruments—musical, pianos, £1,043; linseed, £1,937; machinery and machines, £10,335; meats—pork, frozen, £2,239; meats, potted and preserved, £2,364; manufactures of metals, £8,971; minerals, £1,411; paints and colours, £1,218; phormium fibre, £39,771; tow, £1,762; rugs, £2,201; seeds, grass and clover, £6,809; seeds, n.o.e., £1,144; silver, £1,286; skins—calf, &c., £3,686; sheep-skins with wool, £10,327; sheep-skins without wool, £13,686; pumice stone, £2,511; timber, £186,621; tobacco, cigars, and cigarettes, £1,399; woodenware, £3,139; wool, greasy, £16,700; woollen piece-goods, £1,998.

South Australia.—Bacon and hams, £1,561; meats, potted and preserved, £2,361; phormium fibre, £3,022; timber, £19,085.

Western Australia.—Coals, £1,941; hops, £1,022; potted and preserved meats, £4,982.

Queensland.—Grain and pulse, £572; sulphur, £1,877; timber, £1,774.

Tasmania.—Coals, £3,006; hides, £2,563; seeds, grass and clover, £3,980; timber, £1,585.

Canada.—Kauri-gum, £7,687; hides, £87,859; skins, £40,944; wool, slipe, £18,907.

Cape Colony.—Butter, £24,136; cheese, £2,903.

Natal.—Butter, £12,214; cheese, £2,420.

Bengal.—Horses, £730.

Ceylon.—Grain and pulse, £1,678; silver, £127,185.

Gibraltar.—Frozen beef, £6,348; frozen mutton, £3,432.

Hong Kong.—Fungus, £13,242; gold, specie, £3,040.

Fiji.—Animals—horses, £3,789; sheep, £2,666; apparel and slops, £2,961; bacon and hams, £2,154; bags and sacks, £1,720; beer, £865; bran, £3,235; butter, £5,361; coals, £12,071; electric machinery, £1,577; salted beef, £1,246; potted and preserved meats, £21,316; potatoes, £1,718; rugs, £1,653; silver, specie, £3,781; tea, £1,590; timber, £4,643; woodenware, £2,129.

PRINCIPAL EXPORTS TO FOREIGN COUNTRIES.

United States of America.—Butter, £5,965; kauri-gum, £263,537; leather, £2,734; seeds, grass and clover, £11,781; phormium fibre, £9,135; sheep-skins with wool, £3,001; sheep-skins without wool, £103,629; wool, greasy, £147,547.

Germany.—Kauri-gum, £28,016; minerals, scheelite-ore, £14,685; seeds, grass and clover, £1,523; wool, greasy, £157,740.

Belgium.—Kauri-gum, £1,899; wool, greasy, £23,385.

France.—Wool, greasy, £43,316; kauri-gum, £1,656.

Uruguay.—Living sheep, £8,540; horses, £3,500; grass and clover seed, £1,716.

Argentina.—Living sheep, £1,780.

South Sea Islands.—Animals, living—cattle, £1,680; pigs, £1,678; sheep, £1,067; apparel and slops, £1,257; bacon and hams, £1,616; bags and sacks, £2,161; biscuits, £7,183; boats, £1,069; bran, £1,351; butter, £9,635; carts, drays, and wagons, £2,011; cement, £1,724; coals, £20,690; cordage, £2,132; cotton piece-goods, £3,451; fish, potted and preserved, £3,786; flour, £1,331; grain and pulse, £1,220; hardware, hollow-ware, and ironmongery, £1,565; iron and steel, £6,622; salted beef, £10,180; potted and preserved meats, £33,020; preserved milk, £1,906; kerosene, £6,779; other mineral oils, £1,369; potatoes, £1,434; provisions, n.o.e., £2,055; rugs, £1,339; soap, £7,133; gold, specie, £16,300; silver, specie, £2,055; sugar, £6,638; timber, £7,528; tobacco, cigars, and cigarettes, £2,523; woodenware, £6,139.

China.—Gold, specie, £2,552.

Re-exports.

Owing to the geographical position of New Zealand its re-export trade is insignificant, and has varied but slightly in amount year by year with the exception of 1907, when the re-exports of merchandise were valued at £278,503, or less than $1\frac{1}{2}$ per cent. of the total exports, excluding specie.

EXPORTS OF BRITISH, FOREIGN, AND OTHER COLONIAL PRODUCE (EXCLUDING SPECIE).

	£		£
1895	127,966	1903	133,734
1896	122,571	1904	136,963
1897	144,955	1905	138,539
1898	124,850	1906	152,134
1899	123,682	1907	278,503
1900	168,009	1908	180,675
1901	179,350	1909	173,215
1902	136,860	1910	208,310

New Zealand Produce exported : Value for Twenty Years.

The value of the export during twenty years, 1891-1910, is shown in a table giving the principal items of domestic produce exported each year. The most important commodities included under the heading "Other New Zealand Produce" are coal, silver, minerals, fish, oysters, fungus, kauri-gum, timber, bacon and hams, salted and preserved meats, tallow, sheep, rabbit, and other skins, pelts hides, sausage-skins, and live-stock.

EXPORTS OF NEW ZEALAND PRODUCE.

Calendar Year.	Wool.	Gold.	Frozen Meat.	Butter and Cheese.	Agricultural Produce.	Manufactures	Other N.Z. Produce.	Total.
	£	£	£	£	£	£	£	£
1891	4,129,686	1,007,172	1,194,724	235,933	894,467	420,357	1,516,755	9,400,094
1892	4,313,307	951,963	1,033,377	318,204	1,035,637	367,677	1,345,703	9,365,868
1893	3,774,738	915,921	1,085,167	354,271	716,546	345,636	1,365,164	8,557,443
1894	4,827,016	887,865	1,194,545	366,483	317,655	224,958	1,266,626	9,085,148
1895	3,662,131	1,162,181	1,262,711	378,510	326,029	188,702	1,409,889	8,390,156
1896	4,391,848	1,041,428	1,251,993	411,882	572,355	198,081	1,309,749	9,177,333
1897	4,443,144	980,204	1,566,286	553,122	495,175	197,601	1,360,735	9,596,267
1898	4,645,804	1,080,691	1,698,750	539,466	410,677	253,805	1,695,795	10,324,988
1899	4,324,627	1,513,180	2,088,856	713,617	913,678	378,066	1,867,716	11,799,740
1900	4,749,196	1,439,602	2,123,881	969,731	1,230,565	549,342	1,992,932	13,055,249
1901	3,699,103	1,753,734	2,253,262	1,121,091	1,532,386	425,142	1,905,692	12,690,460
1902	3,354,563	1,951,426	2,718,763	1,369,341	1,045,986	755,232	2,302,288	13,498,599
1903	4,041,274	2,037,832	3,197,043	1,513,065	744,845	823,358	2,480,775	14,838,192
1904	4,673,826	1,987,501	2,793,599	1,565,946	559,243	896,362	2,125,310	14,601,787
1905	5,381,333	2,093,936	2,694,432	1,613,728	428,280	882,960	2,408,861	15,503,530
1906	6,765,655	2,270,904	2,877,031	1,901,237	270,542	988,264	2,766,713	17,840,346
1907	7,657,278	2,027,490	3,420,664	2,277,700	162,967	1,073,702	3,163,337	19,783,138
1908	5,332,781	2,004,799	3,188,515	1,954,601	265,730	572,327	2,575,777	15,894,530
1909	6,305,888	2,006,900	3,601,093	2,744,770	976,170	504,952	3,323,163	19,462,936
1910	8,303,410	1,896,318	3,850,777	3,007,348	481,522	649,828	3,749,960	21,944,163

The preceding table shows that the value of the exports of New Zealand produce increased steadily until 1908, when a slump in prices occurred. The last two years, however, show a big increase.

Value of Articles exported, 1909 and 1910.

A comparative statement of exports for the last two years is given below, showing the value of principal articles, being the produce or manufacture of the Dominion classified according to their nature :—

VALUE OF PRINCIPAL ARTICLES EXPORTED, 1909 AND 1910.

				Year 1910.	Year 1909.	Increase in 1910.	Decrease in 1910.
				£	£	£	£
THE MINE.							
Coal	..	..	..	259,562	183,961	75,601	..
Gold	..	..	..	1,896,318	2,006,900	..	110,582
Silver and minerals	..	..	..	188,468	187,914	554	..
Total	..	..	..	2,344,348	2,378,775	..	34,427
THE FISHERIES.							
Fish	..	..	..	20,600	23,598	..	2,998
Oysters	..	..	..	2,617	2,939	..	322
Whalebone	..	..	..	1,010	1,930	..	920
Whale-oil	..	..	..	1,609	240	1,369	..
Other	..	..	..	285	441	..	156
Total	..	..	..	26,121	29,148	..	3,027
THE FOREST.							
Fungus	..	..	..	16,447	11,530	4,917	..
Kauri-gum	..	..	..	465,044	552,698	..	87,654
Timber—							
Sawn and hewn	..	..	..	407,658	337,740	69,918	..
Other	..	..	..	454	3,962	..	3,508
Total	..	..	..	889,603	905,930	..	16,327
ANIMALS AND PRODUCE.							
Bacon and hams	..	..	..	8,876	5,022	3,854	..
Beef and pork (salted)	..	..	..	15,855	19,678	..	3,823
Butter	..	..	..	1,811,975	1,639,380	172,595	..
Cheese	..	..	..	1,195,373	1,105,390	89,983	..
Hides	..	..	..	230,267	216,636	13,631	..
Live-stock	..	..	..	194,628	74,373	120,255	..
Preserved meats	..	..	..	146,529	132,033	14,496	..
Frozen meat	..	..	..	3,850,777	3,601,093	249,684	..
Sausage-skins	..	..	..	77,307	69,282	8,025	..
Rabbit-skins	..	..	..	132,773	89,533	43,240	..
Sheep-skins and pelts	..	..	..	741,259	684,271	56,988	..
Tallow	..	..	..	756,841	648,452	108,389	..
Wool	..	..	..	8,308,410	6,305,888	2,002,522	..
Other	..	..	..	44,519	41,220	3,299	..
Total	..	..	..	17,515,389	14,632,251	2,883,138	..

VALUE OF PRINCIPAL ARTICLES EXPORTED, 1909 AND 1910—*continued*.

				Year 1910.	Year 1909.	Increase in 1910.	Decrease in 1910.
				£	£	£	£
AGRICULTURAL PRODUCTS.							
Bran and sharps	..	..		11,259	17,609	..	6,350
Chaff	..	..	..	659	637	22	..
Flour	..	..	..	1,419	3,253	..	1,834
Grain—							
Barley	..	..	..	8,479	31,656	..	23,177
Beans and peas	..	..	..	48,851	39,903	8,948	..
Maize	..	..	..	52	28	24	..
Oats	..	..	..	44,299	453,314	..	409,015
Wheat	..	..	..	216,657	305,902	..	89,245
Hops	..	..	..	20,447	11,912	8,535	..
Oatmeal	..	..	..	289	308	..	19
Potatoes	..	..	..	3,509	2,871	638	..
Seeds (grass and clover)	..	..	..	113,568	94,410	19,158	..
Other	..	..	..	12,034	14,367	..	2,333
Total				481,522	976,170	..	494,648
MANUFACTURES.							
Apparel	..	..	..	3,488	3,426	62	..
Leather	..	..	..	23,721	32,338	..	8,617
Phormium fibre	..	..	..	448,414	306,973	141,441	..
Woollen-manufactures	..	..	..	10,653	8,192	2,461	..
Other manufactures	..	..	..	163,552	154,023	9,529	..
Total				649,828	504,952	144,876	..
Miscellaneous				37,352	35,710	1,642	..
Total exports (domestic produce and manufactures)				21,944,163	19,462,936	2,481,227	..
Specie	..	..	..	27,736	25,845	1,891	..
Re-exports	..	..	..	208,310	173,215	35,095	..
Total exports				£22,180,209	£19,661,996	£2,518,213	..

Quantities of Articles exported, 1909 and 1910.

The exports of New Zealand produce or manufacture for the last two years have also to be considered in relation to quantity, and the articles are again grouped in the next table according to the same classification as that used for purposes of comparing the values.

QUANTITIES OF THE PRINCIPAL ARTICLES OF NEW ZEALAND PRODUCE
EXPORTED.

Articles.	Year 1910.	Year 1909.	Increase in 1910.	Decrease in 1910.
The Mine:—				
Coal Tons	277,011	201,685	75,326	..
Gold Oz.	478,286	506,371	..	28,085
Silver "	1,711,235	1,813,830	..	102,595
Minerals Tons	263	260	3	..
The Fisheries:—				
Fish Cwt.	10,306	13,287	..	2,981
Oysters Doz.	339,690	382,937	..	43,247
The Forest:—				
Fungus Cwt.	6,321	4,371	1,950	..
Gum (kauri) .. Tons	8,693	8,250	443	..
Timber (sawn and hewn) S.ft.	81,940,062	71,599,318	10,340,744	..
Animals and Produce:—				
Bacon and hams .. Cwt.	2,699	1,364	1,335	..
Beef and pork (salted) "	11,704	13,687	..	1,983
Butter "	356,535	321,108	35,427	..
Cheese "	451,915	400,607	51,308	..
Hides No.	175,347	189,115	..	13,768
Meats (preserved) .. Cwt.	62,520	58,450	4,070	..
" (frozen) "	2,654,196	2,572,604	81,592	..
Sausage-skins "	22,375	16,188	6,187	..
Skins (rabbit) .. No.	9,103,954	7,533,137	1,570,817	..
" (sheep) and pelts .. "	7,810,586	7,515,414	295,172	..
Tallow Cwt.	520,180	484,160	36,020	..
Wool lb.	204,368,957	189,683,703	14,685,254	..
Agricultural Products:—				
Bran and sharps .. Tons	3,420	5,049	..	1,629
Chaff "	142	150	..	8
Flour "	127	294	..	167
Grain, barley .. Bush	42,928	209,437	..	166,509
" beans and peas .. "	193,527	181,517	17,010	..
" maize "	247	135	112	..
" oats "	444,586	5,133,473	..	4,688,887
" wheat "	1,294,328	1,419,217	..	124,889
Hops Cwt.	3,851	3,107	744	..
Potatoes Tons	505	594	..	89
Seeds (grass and clover) Bush*	307,698	400,629	..	92,931
Manufactures:—				
Ale and beer .. Gal.	16,583	11,466	5,117	..
Cordage Cwt.	1,168	1,242	..	74
Leather "	4,317	5,550	..	1,233
Phormium fibre .. Tons	20,645	14,318	6,327	..
Soap Cwt.	6,927	6,750	177	..

* At 20 lb. to the bushel.

A favourable season, combined with a rise in prices, produced the results shown above. The quantities of wool, frozen meat, and cheese exported are the largest yet recorded in any previous year.

Wool exported and used locally.

The quantity of wool exported in 1910, as previously shown, was 204,368,957 lb., valued at £8,308,410—an increase of 14,685,254 lb., on the quantity exported in the previous year, and of £2,002,522 on the value. The annual production of wool for the last twenty years, taking the exports for the twelve months immediately preceding the commencement of shearing, and adding thereto the quantity used in the Dominion for manufacturing purposes is shown in the next table, but no addition has been made for wool on sheep-skins exported, nor for loss in scouring and washing.

Year ending 30th September.	Quantity exported.	Quantity purchased by Local Mills.	Total.
	lb.	lb.	lb.
1891	108,619,473	2,918,073	111,537,546
1892	110,860,050	3,388,954	114,249,004
1893	119,643,874	2,629,855	122,273,729
1894	128,480,457	2,476,155	130,956,612
1895	129,333,769	3,299,132	132,632,901
1896	128,309,673	3,989,934	132,299,607
1897	134,410,955	3,298,469	137,709,424
1898	150,401,399	3,763,831	154,165,230
1899	143,644,203	4,258,505	147,902,708
1900	144,829,515	3,223,392	148,052,907
1901	143,064,789	4,629,924	147,694,713
1902	155,652,563	4,203,312	159,855,875
1903	160,919,693	5,294,652	166,214,345
1904	141,031,699	5,191,451	146,223,150
1905	146,889,767	3,651,343	150,541,110
1906	152,765,232	4,372,472	157,137,704
1907	164,006,579	4,116,722	168,123,301
1908	163,930,722	4,779,198	168,709,920
1909	187,619,181	5,202,821	192,822,002
1910	194,472,934	5,642,113	200,115,047

From these figures it appears that the quantity of wool used by local mills, and exported, excluding that on skins, has increased by about 95 per cent. during the period covered by the table.

The percentages of greasy, scoured, and washed wool to the total quantities exported during the last ten years are :—

Years.	Greasy. Per Cent.	Scoured and Slipped. Per Cent.	Washed. Per Cent.
1901	78.25	20.61	1.14
1902	73.82	24.26	1.92
1903	76.47	22.15	1.38
1904	79.87	18.93	1.20
1905	82.09	16.82	1.09
1906	82.25	16.91	0.84
1907	83.59	15.87	0.54
1908	81.60	17.35	1.05
1909	82.40	17.09	0.51
1910	83.48	16.27	0.25

Export of Rabbit-skins.

Prior to 1878 rabbit-skins were a very small item in the exports, but in that year the number sent out of the Dominion amounted to 3,951,209. Ten years after (1888) the export had risen to 11,809,407, from which it increased to 17,041,106 in 1893, the greatest number as yet exported in a year. From 1895 the fall was rapid, and the export for 1898 only reached 6,607,934 skins. The last three years has shown a considerable increase.

The figures for the years 1893 to 1910 are quoted :—

Year.	Number of Rabbit-skins exported.	Year.	Number of Rabbit-skins exported.
1893 ..	17,041,106	1902 ..	6,139,794
1894 ..	14,267,385	1903 ..	6,101,899
1895 ..	15,229,314	1904 ..	6,103,930
1896 ..	10,828,612	1905 ..	8,831,107
1897 ..	8,099,334	1906 ..	5,454,738
1898 ..	6,607,934	1907 ..	5,513,900
1899 ..	7,891,648	1908 ..	7,148,625
1900 ..	5,690,893	1909 ..	7,533,137
1901 ..	7,112,008	1910 ..	9,103,954

From the foregoing it will be seen that the importance of the export has very much diminished since 1893. The fall, represented in money value, has been :—

Year.	Value of Rabbit-skins exported. £	Year.	Value of Rabbit-skins exported. £
1893 ..	138,952	1902 ..	52,566
1894 ..	87,993	1903 ..	40,727
1895 ..	85,022	1904 ..	40,843
1896 ..	65,599	1905 ..	66,983
1897 ..	47,472	1906 ..	50,686
1898 ..	51,607	1907 ..	53,757
1899 ..	81,118	1908 ..	66,529
1900 ..	41,689	1909 ..	89,533
1901 ..	57,046	1910 ..	132,773

While the amount of money received for this product is less than in some of the earlier years shown, it may be a satisfactory result, as seeming to indicate some abatement of the rabbit pest. The increase for the last four years is probably due to the more vigorous enforcement of the laws relating to the destruction of rabbits. Large quantities of frozen rabbits are now exported, and are alluded to in the remarks on the frozen-meat industry.

Export of Sheep-skins and Pelts.

These form a more important article of export at the present time than the rabbit-skins, though in the year 1888 the position was the reverse as regards value in money. In that year the number of sheep-skins and pelts sent away from New Zealand was 1,646,401, against 7,810,586 in 1910. The value increased from £83,574 in

the former to £741,259 in the latter year. The numbers exported for the last ten years are quoted:—

Year.	Export of Sheep-skins and Pelts. No.	Year.	Export of Sheep-skins and Pelts. No.
1901 ..	.. 4,601,531	1906 ..	.. 6,551,228
1902 ..	.. 6,144,680	1907 ..	.. 7,016,744
1903 ..	.. 7,142,531	1908 ..	.. 6,322,116
1904 ..	.. 6,037,460	1909 ..	.. 7,515,414
1905 ..	.. 4,931,191	1910 ..	.. 7,810,586

Export of Tallow.

Besides wool and meat, tallow is largely exported, and for the year 1890, 173,300 cwt. were sent away, the export during 1910 being 520,180 cwt. The latest ten years show the following results:—

TALLOW EXPORTED.

Years.	Cwt.	£	Years.	Cwt.	£
1901 ..	.. 335,360	351,710	1906 ..	.. 378,400	455,026
1902 ..	.. 424,060	550,131	1907 ..	.. 414,880	560,965
1903 ..	.. 396,940	517,871	1908 ..	.. 372,520	481,335
1904 ..	.. 322,480	357,974	1909 ..	.. 484,160	648,452
1905 ..	.. 318,942	347,888	1910 ..	.. 520,180	756,841

Frozen Meat exported.

Frozen meat takes second place among the exports of New Zealand produce. In 1910, 2,654,196 cwt., valued at £3,850,777, were shipped. The total export for each year since the commencement of the trade has been:—

Year.	lb.	Year.	lb.
1882 ..	.. 1,707,328	1897 ..	.. 157,687,152
1883 ..	.. 9,853,200	1898 ..	.. 173,798,576
1884 ..	.. 28,445,228	1899 ..	.. 208,972,624
1885 ..	.. 33,204,976	1900 ..	.. 206,621,072
1886 ..	.. 38,758,160	1901 ..	.. 208,045,264
1887 ..	.. 45,035,984	1902 ..	.. 239,513,384
1888 ..	.. 61,857,376	1903 ..	.. 266,408,800
1889 ..	.. 73,564,064	1904 ..	.. 214,253,648
1890 ..	.. 100,934,756	1905 ..	.. 189,356,608
1891 ..	.. 110,199,082	1906 ..	.. 226,856,784
1892 ..	.. 97,636,557	1907 ..	.. 263,738,496
1893 ..	.. 100,262,453	1908 ..	.. 237,473,936
1894 ..	.. 114,827,216	1909 ..	.. 288,131,648
1895 ..	.. 127,018,864	1910 ..	.. 297,269,952
1896 ..	.. 123,576,544		

Included among the frozen meats exported there are considerable quantities of rabbits and hares, the number and value of which, for the last ten years, were as follows:—

Year.	Rabbits.		Hares.	
	Number.	£	Number.	£
1901	4,830,669	114,552	42,202	8,261
1902	4,776,914	116,996	23,421	1,888
1903	4,452,829	99,595	8,145	493
1904	3,788,576	86,422	8,509	509
1905	2,807,242	60,298	8,173	484
1906	2,517,600	54,210	4,993	253
1907	3,325,941	71,904	4,706	481
1908	2,654,061	57,160	4,231	348
1909	2,973,756	63,983	3,987	218
1910	3,139,168	70,058	10,744	839

To ascertain the total value of the meat export in 1910 it is necessary to take into consideration, with the amount of £3,850,777, value of frozen meat before stated, £13,220 for frozen fish; also the value of preserved meats, £146,529; of salted beef and pork, £15,855; and of bacon and hams, £8,876.

Gold exported

The quantity of gold exported in 1910 was 478,286 oz., a decrease of 28,085 oz. on the quantity exported in 1909.

The total quantity of gold entered for duty to the 31st December, 1910, which may be reckoned as approximately the amount obtained in New Zealand, was 19,709,762 oz., of the value of £77,437,131. For fuller information, see special section on mining.

Grain and Pulse exported.

The value of the grain and pulse exported in 1910 was £319,073. The exports for 1909 and 1910 were made up as under:—

	1910.		1909.	
	Bushels.	£	Bushels.	£
Wheat	1,294,328	216,657	1,419,217	305,902
Oats	444,586	44,299	5,133,473	453,314
Barley	42,928	8,479	209,437	31,656
Maize	247	52	135	28
Peas and beans	198,527	43,851	181,517	39,903
Rye and unenumerated	5,000	735	8,147	1,346
Total quantity and value	1,985,616	£319,073	6,951,926	£832,149

Compared with the previous year, the quantity and value exported in 1910 shows a considerable decrease.

It will be seen by the figures given below that there is no regular export of wheat from New Zealand. Unless there is a rise in price, consequent on a general shortage, it is found more profitable to consume any surplus grain on the farm and export other products.

Year.	Wheat exported. Bushels.	Year.	Wheat exported. Bushels.
1892	2,460,774	1903	71,700
1894	228,904	1904	813,535
1896	453,123	1905	967,151
1898	10,090	1906	61,199
1899	2,901,676	1907	1,374
1900	2,867,069	1908	1,385
1901	2,301,092	1909	1,419,217
1902	194,671	1910	1,294,328

The imports of wheat during 1898 exceeded the exports by upwards of 50,000 bushels, but from 1899 to 1906 the imports were practically nil, the small quantity introduced being for seeding purposes only. In 1910 the import was 3,128 bushels, of which 2,970 bushels came from New South Wales.

The quantity of oats exported in 1891 and succeeding years was as follows:—

Year.	Export of Oats. Bushels.	Year.	Export of Oats. Bushels.
1891	4,052,414	1903	4,956,330
1892	3,830,444	1904	2,693,417
1894	1,963,288	1905	1,076,916
1896	2,247,053	1906	734,997
1898	816,210	1907	36,693
1899	3,520,734	1908	972,896
1900	5,818,648	1909	5,133,473
1901	10,514,924	1910	444,586
1902	5,185,812		

Of the above total shipped in 1910, New South Wales received 43,716 bushels, the United Kingdom 254,617 bushels, Victoria 108,551 bushels, Ceylon 15,965 bushels, Queensland 4,920 bushels, Fiji 5,036 bushels, Natal 2,230 bushels, Madras 2,123 bushels, Uruguay 2,501 bushels, and the South Sea Islands 2,925 bushels.

The export of this cereal, like that of wheat, depends upon the conditions of supply in other countries.

Butter and Cheese exported.

The total export of butter and cheese in the past twenty years, and the quantity of each commodity sent to the United Kingdom, is tabulated:—

Year.				Total Export of Butter.	Butter Exported to the United Kingdom.	Total Export of Cheese.	Cheese Exported to the United Kingdom.
				Cwt.	Cwt.	Cwt.	Cwt.
1891	..	..	..	39,430	28,989	39,770	29,565
1892	..	..	..	53,930	41,509	41,493	30,000
1893	..	..	..	58,149	52,363	46,201	41,567
1894	..	..	..	60,771	58,845	55,655	54,540
1895	..	..	..	57,964	55,194	76,743	73,369
1896	..	..	..	71,353	60,092	71,372	58,692
1897	..	..	..	99,002	79,849	77,683	67,681
1898	..	..	..	96,801	80,814	68,711	41,412
1899	..	..	..	136,086	121,502	69,440	40,901
1900	..	..	..	172,583	165,871	102,849	81,908
1901	..	..	..	201,591	170,903	104,294	74,510
1902	..	..	..	253,998	170,207	74,746	50,325
1903	..	..	..	285,106	249,016	74,780	64,661
1904	..	..	..	314,360	299,171	84,526	82,046
1905	..	..	..	305,722	282,275	88,562	85,653
1906	..	..	..	320,225	306,739	131,206	129,321
1907	..	..	..	328,441	314,081	236,833	234,517
1908	..	..	..	229,971	211,242	280,798	276,212
1909	..	..	..	321,108	301,693	400,607	398,619
1910	..	..	..	356,535	345,400	451,915	449,167

Of the butter exported in 1910, 345,400 cwt., value £1,750,256, were shipped to the United Kingdom; 515 cwt., value £2,808, to

New South Wales; 959 cwt., value £5,361, to Fiji; 6,836 cwt., value £36,350, to Cape Colony and Natal; 1,373 cwt., value £9,635, to the South Sea Islands; 186 cwt., value £986, to Canada, and 1,156 cwt., value £5,965 to United States.

Of the cheese exported, 449,167 cwt., value £1,187,181, were sent to the United Kingdom; 2,043 cwt., value £5,323, to Cape Colony and Natal; 266 cwt., value £1,192, to New South Wales; 155 cwt., value £489, to Fiji; 78 cwt., value £475, to Victoria; 45 cwt., value £132, to Bengal; 35 cwt., value £114, to Queensland; 54 cwt., value £159, to South Sea Islands; 30 cwt., value £102, to Bombay, and 44 cwt., value £206, to various countries.

Phormium fibre exported.

Phormium fibre, of which 20,645 tons (excluding 4,501 tons of tow), valued at £448,414, were exported in 1910, shows a decrease in quantity and value, on comparing these figures with those for 1909, when the quantity sent away was 14,318 tons, valued at £306,973.

The market price of phormium fibre is influenced by the supply of Manilla hemp. The raw material is abundant in this country, but the present cost of treatment must be reduced by the introduction of more economical methods, and royalties demanded by the owners of flax-lands adjusted in proportion to prices, otherwise the industry is likely to give way to its more cheaply produced competitor.

Kauri-gum exported.

The export for 1910 (8,693 tons) is greater than that of the previous year by 443 tons. The value was £465,044, or an average of £53 9s. 11d. per ton. Full information as to the uses of this resin and the kauri-gum industry generally was given in a special article in Part III of the Year-book for 1900. It embraces interesting matter from the report of the Royal Commission which investigated the whole subject in 1898.

EXPORTS, 1910.

Articles exported.	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Acid—			£	£	£
Unenumerated .. lb.	..	342	..	29	29
Alkali—					
Potash and caustic potash .. cwt.	..	4	..	4	4
Soda, carbonate, and bicarbonate .. "	..	4	..	2	2
Soda, caustic .. "	..	3	..	5	5
Soda, crystals .. "	6	..	2	..	2
Unenumerated .. "	..	4	..	5	5
Animals, living—					
Birds .. No.	23	..	8	..	8
Cattle .. "	227	..	3,177	..	3,177
Deer .. "	2	..	40	..	40
Dogs .. "	74	1	262	10	273
Goats .. "	2	..	6	..	6
Guinea pigs .. "	20	..	3	..	3
Horses .. "	5,643	7	167,075	320	167,395
Ostriches .. "	2	..	80	..	80
Paradise ducks .. "	4	..	2	..	2
Pigs .. "	729	..	2,170	..	2,170
Poultry .. "	1,295	..	277	..	277
Sheep .. "	6,335	..	21,528	..	21,528
Apparel and slops n.o.e. ..	..	..	3,488	6,550	10,038
Arms, ammunition, and explosives—					
Accoutrements .. "	..	..	..	1	1
Cartridges .. No.	..	107,500	..	316	316
Detonators .. "	..	8,100	..	19	19
Dynamite .. lb.	..	1,570	..	85	85
Firearms .. No.	..	79	..	126	126
Fuse .. coils	..	1,834	..	53	53
Powder, blasting .. lb.	..	150	..	8	8
" sporting .. "	..	675	..	55	55
Other explosives .. "	..	6,430	..	259	259
Asphalt .. cwt.	..	176	..	29	29
Bacon and hams—					
Bacon .. cwt.	1,762	..	5,451	..	5,451
Hams .. "	937	1	3,425	5	3,430
Bags and sacks—					
Cornsacks .. doz.	592	20,287	140	3,707	3,847
Unenumerated .. "	1,070	599	178	99	277
Basketware and wickerware ..	..	..	6	37	43
Beche-de-Mer .. cwt.	..	1	..	4	4
Beer .. gal.	16,533	2,693	1,944	682	2,626
Belting—					
Leather .. lb.	..	335	..	77	77
Other than leather .. "	..	..	..	17	17

EXPORTS, 1910—continued.

Articles exported	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Beverages, non-alcoholic—			£	£	£
Aerated and mineral waters ..	..	..	1,048	52	1,100
Coffee-essence ..	..	..	..	2	2
Fruit-juices, sweetened ..	..	..	4	5	9
Fruit-juices, unsweetened gal.	1,419	71	87	13	100
Bicycles and tricycles .. No.	15	44	110	288	398
Materials for ..	..	..	..	782	782
Motor-bicycles and tricycles No.	..	1	..	30	30
Biscuits—					
Fancy and other kinds lb.	22,087	1,510	413	60	473
Ships', plain .. cwt.	6,564	10	7,377	36	7,413
Blacking ..	..	..	5	112	117
Blacklead ..	..	..	..	22	22
Blue .. lb.	..	3,064	..	79	79
Boats .. No.	15	6	1,655	247	1,902
Materials for ..	..	..	50	..	50
Bones .. tons	30	..	154	..	154
Books, &c., printed ..	..	..	6,306	2,712	9,018
Boots and shoes .. doz. prs.	75	641	269	1,744	2,013
Gum boots ..	..	23	..	192	192
Bran .. tons	3,363	..	10,951	..	10,951
Brass, scrap .. cwt.	536	..	812	..	812
Tubing or stamped work in the rough .. cwt.	..	9	..	34	34
Bricks—					
Building .. No.	8,600	300	26	1	27
Fire ..	5,562	..	51	..	51
Brushes, brushware, and brooms ..	..	..	37	177	214
Butter .. cwt.	356,535	..	1,811,975	..	1,811,975
Candles .. lb.	25	3,900	1	88	89
Canes and rattans ..	..	..	50	..	50
Canvas ..	..	..	6	326	332
Cards, playing .. packs	72	576	1	15	16
Carpeting and drugging ..	..	..	5	1,234	1,239
Carriages, &c.—					
Carriages .. No.	35	4	720	65	785
Carts, drays, and wagons ..	175	2	2,048	32	2,080
Motor cars and cycles ..	..	10	..	4,431	4,431
Motor-vehicles, bodies for ..	..	4	..	336	336
Motor-vehicles, chassis for ..	..	3	..	1,435	1,435
Materials for ..	..	..	..	1,058	1,058
Perambulators and go-carts No.	9	1	25	1	26
Materials for ..	..	..	303	610	913
Cement .. barrels	3,696	833	1,492	416	1,908
Chains and chain cables cwt.	18	63	19	77	96
Cheese ..	451,915	..	1,195,373	..	1,195,373
China, porcelain, and parianware ..	..	..	..	94	94
Clocks .. No.	..	114	..	156	156
Coal .. tons	277,011	153	259,562	159	259,721

EXPORTS, 1910—*continued*

Articles exported.	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
			£	£	£
Cocoa and chocolate .. lb. ..	..	3,216	..	330	330
Cocoa-beans	..	12,260	..	338	338
Cocoa-butter	..	2,240	..	124	124
Coffee—					
Raw lb. ..	..	7,430	..	213	213
Roasted	..	2,275	150	173	323
Coke tons 6	6	1	10	2	12
Combs	..	..	..	10	10
Confectionery—					
Chocolate in plain trade packages.. .. lb. ..	526	970	34	47	81
Chocolate in fancy packages.. ..	..	..	..	125	125
Unenumerated lb. ..	10,561	724	198	45	243
Copper—					
Pig, bar, tube, or sheet cwt. ..	..	2	1	8	9
Nails	..	13	..	70	70
Scrap	23	..	63	..	63
Copra tons 273	273	1,684	5,647	35,511	41,158
Cordage cwt. 1,168	1,168	336	2,219	788	3,007
Iron and steel	..	85	..	161	161
Cork, cut	..	..	..	79	79
Cotton piece-goods—					
Butter and cheese cloth	..	..	..	15	15
Tubular-woven cotton-cloth	..	..	..	580	580
Unenumerated	..	..	..	4,202	4,202
Cotton waste cwt. ..	..	2	..	5	5
Drapery	..	..	214	2,854	3,068
Lace and laces n.o.e.	..	..	..	447	447
Ribbons and crape	..	..	..	590	590
Tailors' trimmings	..	..	20	168	188
Drugs, chemicals, and druggists' wares—					
Anhydrous ammonia	..	..	13	8	21
Baking-powder	..	..	40	8	48
Carbide of calcium tons ..	..	1	..	6	6
Chemicals n.o.e.	..	..	6	116	122
Cream of tartar lb. ..	..	1,680	..	52	52
Disinfectants	..	..	..	9	9
Glycerine, refined	..	..	33	..	33
Gums	..	..	10	..	10
Insecticides	..	..	2	72	74
Medicinal preparations, drugs, druggists' sundries, &c.	..	..	196	777	973
Medicinal preparations, containing over 50 per cent. of proof spirits lb. ..	..	230	..	41	41

EXPORTS, 1910—continued.

Articles exported.	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Drugs, chemicals, and druggists' wares—continued.			£	£	£
Sheep-dip	..	..	463	269	752
Sheep and horse drenches and sheep-licks	..	..	17	..	17
Vanilla-beans .. lb.	..	20,271	..	2,678	2,678
Washing-powder	..	..	..	83	83
Unenumerated	..	..	826	464	1,290
Dyes	..	..	6	64	70
Earthenware	..	..	105	601	706
Eggs for setting .. doz.	3	..	1	..	1
Engine-packing	..	..	..	35	35
Essences, flavouring—					
Spirituous gal.	..	15	1	44	45
Unenumerated	..	..	1	2	3
Essential oils lb.	..	16	..	57	57
Fancy goods and toys	..	..	363	6,389	6,752
Curiosities	..	..	371	249	620
Feathers lb.	5,845	..	68	..	68
Felt sheathing	..	..	..	4	4
Fire-engines No.	..	1	..	7	7
Fireworks	..	..	..	17	17
Fish—					
Dried, pickled, or salted cwt.	57	41	92	101	193
Frozen	8,893	..	13,220	..	13,220
Ova No.	476,000	..	285	..	285
Potted and preserved lb.	151,896	159,018	7,288	4,120	11,408
Fishing-tackle—					
Fish-hooks	..	..	..	6	6
Unenumerated	..	..	3	318	321
Floorcloth and oilcloth	..	..	..	73	73
Flour tons	127	15	1,419	158	1,577
Foods, animal—					
Chaff tons	142	9	659	50	709
Unenumerated	..	..	303	..	303
Foods, farinaceous—					
Arrowroot lb.	..	460	..	6	6
Infants and invalids	..	..	..	111	111
Macaroni and vermicelli	..	216	..	6	6
Maizena and cornflour	..	2,967	..	51	51
Sago and tapioca .. cwt.	..	23	..	24	24
Unenumerated	..	..	100	2	102
Fruits—					
Bottled and preserved doz.	496	521	235	184	419

EXPORTS, 1910—continued.

Articles exported.	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
			£	£	£
Fruits, dried—					
Currants lb.	..	4,994	..	66	66
Figs, dates, and prunes ..	..	1,729	..	28	28
Raisins "	..	1,554	..	32	32
Unenumerated "	..	4,225	..	112	112
Fruits, fresh—					
Apples and pears lb.	215,136	1,592	1,590	16	1,606
Other kinds "	10,007	23,831	110	121	231
Fruits, lemon and orange peel in brine lb.	28	..	1	..	1
Fungus cwt.	6,321	..	16,447	..	16,447
Furniture, cabinetware, and upholstery "	..	..	919	552	1,471
Kapok cwt.	..	14	..	43	43
Furniture, knife and plate powder and polish "	..	..	3	30	33
Furs "	..	..	..	515	515
Gelatine and isinglass .. lb.	..	1,848	..	107	107
Glass—					
Bottles, empty "	..	..	10	158	168
Broken cwt.	15,162	..	1,614	..	1,614
Mirrors and looking-glass ..	..	..	1	142	143
Plate, bevelled, and silvered ..	..	..	..	18	18
Window sup. ft.	..	9,969	..	132	132
Glassware "	..	..	15	627	642
Glue and size cwt.	..	14	..	44	44
Glycerine (crude) "	760	..	1,702	..	1,702
Gold oz.	478,286	33	1,896,318	135	1,896,453
Grain and pulse—					
Barley bush.	42,928	..	8,479	..	8,479
Beans and peas "	198,527	20	48,851	5	48,856
Maize "	247	..	52	..	52
Oats "	444,586	..	44,299	..	44,299
Rye "	4,881	..	696	..	696
Wheat "	1,294,328	..	216,657	..	216,657
Unenumerated "	119	302	39	72	111
Ground, unenumerated .. cents	40	7	24	6	30
Grease cwt.	..	21	..	22	22
Grindery—					
Heel and toe plates "	..	..	..	7	7
Unenumerated "	..	..	4	58	62
Gum, kauri tons	8,693	2	465,044	162	465,206
Haberdashery "	..	..	7	54	61
Buttons, &c. "	..	..	..	55	55
Sewing cottons, silks, and threads "	..	..	..	186	186

EXPORTS, 1910—continued.

Articles exported.	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
			£	£	£
Hair cwt.	1,251	..	7,040	..	7,040
Hardware, hollow-ware, and iron-mongery	..	..	531	3,217	3,748
Hats and caps .. doz.	128	111	103	192	295
Hatters' materials	..	..	..	25	25
Hay and straw .. tons	42	..	180	..	180
Hides No.	175,347	..	230,267	..	230,267
Honey lb.	86,143	..	1,731	..	1,731
Hops cwt.	3,861	..	20,447	..	20,447
Horns and hoofs .. tons	272	..	3,838	..	3,838
Hose, canvas, and indiarubber ..	..	..	..	24	24
Hosiery	..	..	846	215	1,061
Indiarubber and gutta-percha goods	..	..	..	1,330	1,330
Indiarubber, old .. cwt.	1,693	..	5,127	..	5,127
Ink, printing .. lb.	..	186	..	13	13
Writing .. gal.	..	10	..	7	7
Instruments, musical—					
Pianos No.	..	50	..	2,207	2,207
Unenumerated	..	..	..	142	142
Materials for	..	..	..	3	3
Instruments—					
Optical	..	..	..	20	20
Scientific	..	..	12	129	141
Surgical and dental ..	..	..	26	813	839
Surveying	..	..	..	374	374
Iron and steel—					
Angle	..	..	4	1	5
Bar, bolt, and rod .. tons	4	62	54	663	717
Bolts and nuts .. cwt.	119	28	232	45	277
Castings for ships ..	..	..	39	29	68
Galvanized manufactures ..	..	..	315	95	410
Hoop	..	..	..	4	4
Pipes and fittings .. tons	..	24	..	408	408
Rails	..	5	..	51	51
Sheet and plate ..	..	3	..	47	47
Galvanized, corrugated cwt.	..	4,670	..	3,906	3,906
plain	..	248	..	266	266
Staples, fencing ..	..	29	..	26	26
Tanks No.	60	155	122	376	498
Wire, fencing, barbed tons	..	19	..	295	295
plain	..	29	..	343	343
Wire netting	..	..	8	533	541
Jams, jellies, and preserves lb.	55,510	9,990	906	188	1,094
Jellies, concentrated ..	..	2,089	..	115	115

EXPORTS, 1910—continued.

Articles exported.	Quantities.		Value in Sterling.		Total.
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	
			£	£	£
Jewellery	..	..	28	1,304	1,332
Jewellers' sweepings ..	..	..	1,910	30	1,940
Lamps, lanterns, and lampwick				360	360
Lard cwt.	3,765	..	5,740	..	5,740
Lead—					
Pigs and bars .. cwt.	..	2	..	2	2
Sheet	..	2	..	2	2
Leather	4,317	66	23,721	1,901	25,622
Manufactures unenumerated..	..	..	47	11	58
Lime bush.	4,952	..	296	..	296
Linen piece-goods	..	..	..	68	68
Hessians and scrim	..	..	..	19	19
Linseed centals	5,192	..	3,569	..	3,569
Machinery and machines—					
Agricultural	..	..	4,989	3,388	8,377
Ploughs and harrows	..	..	195	97	292
Cash-registering .. No.	26	14	380	249	629
Dairying	..	..	1,777	988	2,765
Dredging	..	..	2,923	404	3,327
Electric	..	..	4	5,247	5,251
Engines, steam .. No.	1	4	900	203	1,103
Engines, gas and oil ..	1	17	200	1,105	1,305
Flour-milling	..	..	..	192	192
Knitting and sewing .. No.	..	101	..	499	499
Mining	..	..	453	65	518
Printing	..	..	..	1,662	1,662
Refrigerating	..	..	..	92	92
Woollen-milling	..	..	..	40	40
Unenumerated	..	..	1,559	4,063	5,622
Materials for, and parts of ..	..	..	79	534	613
Malt bush.	4	..	2	..	2
Manures—					
Bonedust tons	1	2	5	9	14
Unenumerated	38	4	252	26	278
Marble, dressed, polished, and manufactures	..	..	94	14	108
Matches and vestas—					
Wax gross boxes	1	78	1	18	19
Wooden	..	7,698	..	648	648
Mats and matting	..	..	1	97	98
Meal, oats centals	493	..	289	..	289
Meats—					
Beef, frozen .. cwt.	509,667	..	598,622	..	598,622
" salted	11,673	..	15,790	..	15,790

EXPORTS, 1910—continued.

Articles exported.	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Meats—continued.			£	£	£
Kidneys, frozen .. cwt.	7,463	..	15,729	..	15,729
Lamb, frozen .. carcasses	3,454,233	..	1,878,800	..	1,878,800
.. = cwt.	1,050,159	..			
Mutton, .. carcasses	1,920,284	..	1,196,720	..	1,196,720
.. = cwt.	938,455	..			
Mutton (joints), frozen ..	45,898	..	58,629	..	58,629
Poultry, frozen .. pairs	61	..	22	..	22
Pork, frozen .. cwt.	10,976	..	23,892	..	23,892
.. salted .. "	31	..	65	..	65
Veal, frozen .. "	95	..	96	..	96
Rabbits, frozen in the skins No.	3,139,168	..	70,058	..	70,058
.. = cwt.	85,464	..			
Hares, frozen in the skins No.	10,744	..	839	..	839
.. = cwt.	782	..			
Other kinds, frozen ..	5,237	..	7,392	..	7,392
Potted and preserved ..	62,520	6	146,529	24	146,553
Extract lb.	57,943	6	7,558	2	7,560
Unenumerated .. cwt.	41	..	74	..	74
Metal, manufactured articles of—					
Anchors .. No.	1	38	2	38	40
Meters—water, gas, and electricity ..	..	..	..	290	290
Pumps	..	..	18	396	414
Rivets and washers .. cwt.	..	2	..	4	4
Typewriters .. No.	..	14	..	208	208
Unenumerated	..	..	2,633	13,159	15,792
Metal, old cwt.	17,546	..	7,764	..	7,764
Metal, sheathing, other than copper	..	18	..	76	76
Milk, preserved .. lb.	235,590	75,685	5,326	1,524	6,850
Millinery	..	..	..	100	100
Feathers, ornamental ..	..	..	691	106	797
Minerals—					
Auriferous ore .. tons	100	..	1,538	..	1,538
Pyrites	2	..	33	..	33
Manganese-ore	5	..	15	..	15
Scheelite-ore	143	..	15,070	..	15,070
Unenumerated	13	..	250	..	250
Mouldings and panels ..	..	..	258	18	276
Mustard lb.	..	24	..	2	2
Nails, iron cwt.	48	574	49	520	569
Naphtha gal.	..	8	..	1	1
Nuts—					
Almonds, shelled and unshelled lb.	..	128	..	4	4
Walnuts	1,351	..	38	..	38
Unenumerated	244	488	8	14	22

EXPORTS, 1910—*continued.*

Articles exported.	Quantities.		Value in Sterling.			
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.	
			£	£	£	
Oakum cwt.	..	3	..	6	6	
Oars No.	4	98	2	36	38	
Oils—						
Castor gal.	..	109	..	18	18	
Cod-liver "	..	18	..	3	3	
Colza "	..	198	..	25	25	
Cocanut "	150	60	28	11	39	
Fish, penguin, and seal ..	17,770	..	1,327	..	1,327	
Linseed "	..	2,002	..	406	406	
Mineral, kerosene	..	168,032	..	6,847	6,847	
Mineral, other kinds ..	1,100	26,269	49	1,576	1,625	
Neatsfoot "	5,686	30	744	4	748	
Olive "	..	38	..	10	10	
Whale "	23,323	..	1,609	..	1,609	
Unenumerated "	1,330	2,336	116	241	357	
In vessels under 1 gallon ..	..	..	1	132	133	
Oilmen's stores	..	..	1	91	92	
Onions cwt.	5,123	439	2,085	232	2,317	
Oysters doz.	339,690	..	2,617	..	2,617	
Paints and colours—						
Ground in oil cwt.	1	354	2	463	465	
Mixed, ready for use ..	68	838	138	3,033	3,171	
Unenumerated "	56	38	36	70	106	
Paper—						
Bags cwt.	272	10	266	16	282	
Butter-paper "	..	1	..	1	1	
Paperhangings "	..	..	..	7	7	
Printing "	..	106	..	198	198	
Wrapping "	197	86	177	155	332	
Writing "	2	40	3	34	37	
Unenumerated "	16	..	21	..	21	
Peas, split "	1	..	2	..	2	
Peel, candied and drained ..	lb.	784	448	19	40	59
Perfumery—						
Perfumed spirits gal.	..	14	..	23	23	
Toilet preparations	..	..	3	141	144	
Unenumerated "	..	..	3	..	3	
Phormium tons	20,645	..	448,414	..	448,414	
Tow "	4,501	..	32,105	..	32,105	
Photographic goods	..	..	4	265	269	
Copper, glass and zinc plates for photo-lithographic work ..	..	..	..	16	16	
Cameras and lenses	..	..	..	115	115	
Sensitized surfaces	..	..	..	623	623	
Pickles gal.	81	151	25	46	71	
Pictures "	..	..	950	694	1,644	

EXPORTS, 1910--*continued.*

Articles exported	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
			£	£	£
Plants and shrubs	..	..	840	3	843
Plaster-of-paris .. cwt.	..	200	..	50	50
Plate and platedware	..	..	167	2,558	2,725
Pollard and sharps .. tons	57	..	308	..	308
Portmanteaux and travelling-bags	..	..	17	27	44
Potatoes tons	505	14	3,509	152	3,661
Printing materials—					
Stereotypes and matrices ..	..	..	..	15	15
Type and materials n.o.e. ..	..	..	52	158	210
Provisions—					
Eggs doz.	6,497	..	459	..	459
Unenumerated	..	..	2,210	654	2,864
Putty cwt	..	2	..	2	2
Rags "	2,010	..	2,198	..	2,198
Rice "	..	1,539	..	1,091	1,091
Rugs "	..	..	8,476	55	8,531
Saddlery and harness	..	..	796	79	875
Saddlers' ironmongery	..	..	..	11	11
Salt tons	..	23	..	144	144
Saltpetre cwt.	..	1	..	2	2
Sauces gal.	141	469	57	267	324
Sausage-skins cwt.	22,375	11	77,307	91	77,398
Seeds—					
Grass and clover	54,946	1,327	113,568	3,628	117,196
Unenumerated	..	..	2,438	247	2,685
Ship-chandlery	..	..	105	84	189
Silks	..	..	..	189	189
Silver oz.	1,711,235	..	171,562	..	176,562
Skins—					
Calf and other kinds .. No.	118,323	1,633	24,742	345	25,087
Rabbit	9,103,954	..	132,773	..	132,773
Sealskins No.	..	220	..	47	47
Sheep, with wool .. No.	983,492	..	223,797	..	223,797
Sheep, without wool.. No.	6,827,094	..	517,462	..	517,462
.. ..	18,670,998	..	..	..	..
Soap—					
Common cwt.	6,927	1	7,242	2	7,244
Powder extract, &c.	..	..	..	58	58
Unenumerated	..	..	172	140	312
Specie—					
Gold	..	..	..	21,900	21,900
Silver	..	..	..	5,836	5,836
Specimens illustrative of natural science	..	..	237	3	240

EXPORTS, 1910—*continued.*

Articles exported.	Quantities.		Value in Sterling.		Total.
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	
Spices—			£	£	£
Ground lb.	40	114	1	3	9
Unground "	..	15	..	1	1
Spirits—					
Bitters, cordials, and liqueurs gal.	..	119	..	155	155
Brandy "	..	614	..	406	406
Geneva and gin, unsweetened ..	..	1,125	..	432	432
Methylated "	21	68	4	12	16
Rum "	..	149	..	73	73
Sweetened "	..	14	..	7	7
Whisky "	..	4,605	..	1,941	1,941
Unenumerated "	..	1	..	1	1
Starch lb.	148	4,088	3	70	73
Stationery "	..	..	1,005	1,641	2,646
Apparatus for teaching "	..	..	3	17	20
Bookbinders' materials "	..	..	11	200	211
Handbills, circulars, &c. lb.	113	4,727	10	171	181
Stone—					
Building tons	27	..	17	..	17
Granite or other stone, dressed or polished "	..	..	140	36	176
Granite, unwrought tons	8	..	18	..	18
Greenstone cwt.	69	..	779	..	779
Grind, mill, oil, or whet "	..	..	..	13	13
Pumice tons	1,792	..	4,357	..	4,357
Sugar—					
Refined lb.	921,280	4,832	6,761	42	6,803
Glucose "	..	120	..	2	2
Golden syrup cwt.	39	..	40	..	40
Molasses and treacle "	2	9	2	9	11
Sulphur "	..	4,300	..	1,377	1,377
Tallow tons	22,742	..	646,339	..	646,339
Mutton stock, oleomargarine ..	3,267	..	110,502	..	110,502
Tanning materials—					
Bark "	78	..	450	..	450
Other kinds "	..	..	..	180	180
Tar "	..	..	10	19	29
Tarpaulins and tents "	..	..	169	46	215
Tea lb.	..	71,871	..	4,087	4,087
Textile piece-goods other than silk, cotton, linen or woollen "	..	..	10	2,052	2,062
Articles made up from other than apparel "	..	..	8	136	144
Timber—					
Logs, hewn sup. ft.	20,708	480	180	4	184
Posts No.	60	..	4	..	4
Sawn, undressed sup. ft.	81,105,597	25,406	397,588	254	397,842
" dressed "	813,757	22,279	9,890	243	10,133

EXPORTS, 1910—continued.

Articles exported	Quantities		Value in Sterling.		
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
			£	£	£
Tin—					
Block cwt.	..	4	..	31	31
Scrap "	1,555	..	87	..	87
Sheet "	..	218	..	194	194
Tinfoil lb.	..	560	..	48	48
Tinware "	..	..	127	13	140
Tobacco—					
Manufactured .. lb.	..	41,617	..	3,885	3,885
Cigars "	..	1,444	..	1,018	1,018
Cigarettes "	..	2,058	..	769	769
Tobacco-pipes "	..	..	..	131	131
Tools and implements—					
Axes and hatchets "	..	..	..	21	21
Engineers' machine tools "	..	..	..	107	107
Spades, shovels, and forks "	..	..	1	21	22
Unenumerated "	..	..	336	357	693
Turpentine gal.	..	127	..	30	30
Twine "	..	..	6	66	72
Binder cwt.	91	618	168	1,242	1,410
Nets and netting "	..	..	13	28	41
Umbrellas and parasols "	..	..	3	19	22
Varnish and gold-size gal.	76	653	34	289	323
Vegetables, fresh, dried, and preserved "	..	..	312	322	634
Vinegar gal.	85	88	12	23	35
Watches No.	..	932	..	650	650
Wax, paraffine lb.	..	73,172	..	687	687
Whalebone cwt.	23	..	1,010	..	1,010
Whiting and chalk "	..	12	..	4	4
Wine—					
Australian gal.	..	446	..	228	228
British South African "	..	4	..	2	2
Sparkling "	..	563	..	1,189	1,189
Other kinds "	34	885	19	503	522
Woodenware "	..	..	9,956	1,935	11,891
Wool—					
Greasy lb.	170,589,964	..	6,735,160	..	6,735,160
Scoured "	14,578,345	..	760,895	..	760,895
Slips "	18,693,037	..	792,876	..	792,876
Washed "	507,611	..	19,479	..	19,479
Woolpacks doz.	..	1	..	1	1
Woollen piece-goods "	..	..	1,868	686	2,554
blankets pairs	250	..	306	..	306

EXPORTS, 1910—*continued.*

Articles exported.	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Dominion.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
			£	£	£
Yarns	..	..	3	2	5
Coir, flax, jute, and hemp ..	..	..	..	57	57
Zinc—					
Plain sheet .. cwt.	..	33	..	57	57
Perforated sheet .. "	..	11	..	17	17
Spelter	695	3	658	6	664
Zinc dross	96	..	39	..	39
Manufactures	..	..	..	1	1
Miscellaneous—					
Goods, manufactured ..	..	..	390	964	1,354
" unmanufactured ..	..	..	2,162	170	2,332
Parcels-post	..	..	35,190	..	35,190

A table is appended giving details of goods forwarded in the year 1910 to the Cook and other Pacific Islands annexed to New Zealand. These do not appear as exports from the Dominion, being merely part of the internal trade or transactions between one portion of the country and another.

Articles.	Quantities.	Value. £
Animals, living	140 number	478
Apparel and slops	..	2,317
Arms, ammunition, &c.—		
Firearms	36 number	92
Cartridges	32,800 "	173
Powder, shot, fuse, &c. ..	..	90
Bacon and hams	30 cwt.	126
Bags and sacks	2,821 doz.	825
Beer	160 gal.	43
Beverages, non-alcoholic ..	..	50
Bicycles and tricycles ..	..	347
Biscuits—		
Fancy and other kinds ..	11,247 lb.	237
Ships', plain	2,512 cwt.	3,033
Boats	1 number	400
Boots and shoes	141 doz. pairs	558
Butter	243 cwt.	1,500
Carriages, &c.	..	413
Cement	600 casks	308
China, porcelain, and parian ware	..	102
Clocks	..	11
Coals	5,123 tons	5,333
Cordage	123 cwt.	240
Cotton piece-goods	..	2,459

EXPORTS.

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Articles.	Quantity.	Value £
Drapery	..	1,919
Laces and sundries	..	139
Drugs and druggists' sundries	..	490
Fancy goods	..	277
Fish, potted or preserved	35,962 lb.	1,192
Flour	218 tons	2,373
Furniture	..	785
Hardware	..	1,352
Hats and caps	..	245
Iron and steel	..	1,922
Leather	258 lb.	122
Machinery and machines	..	163
Matches and vestas	2,123 gross boxes	357
Meats, frozen, salted, and preserved	3,267 cwt.	7 008
Metal manufactures	..	208
Milk, preserved	..	362
Millinery	..	154
Nails	645 cwt.	597
Oils	16,838 gal.	814
Paints	61 cwt.	126
Potatoes	14 tons	182
Provisions n.o.e.	..	1,286
Rice.. .. .	500 cwt.	361
Rugs	..	558
Saddlery and harness	..	140
Soap	..	1,239
Specie, gold	..	975
silver	..	1,550
Spirits	530 gal.	230
Stationery	..	142
Sugar	2,293 cwt.	2,010
Textile piece-goods n.o.e.	..	84
Tea	3,351 lb.	200
Timber	117,560 sup. ft.	1,300
Tobacco	5,959 lb.	719
Woodenware	..	6,903
Miscellaneous	..	3,028
Total value of goods shipped to the Islands	..	£60,647

SECTION IX.—METEOROLOGY.

TEMPERATURE, RAINFALL, ATMOSPHERIC PRESSURE, AND WIND
THROUGHOUT NEW ZEALAND, AS OBSERVED AT TWELVE
STATIONS, FOR THE YEAR 1910.

THE OBSERVATIONS WERE TAKEN AT 9.30 A.M.

Stations and Months.	Temperatures in Shade.					Rainfall.		Mean Height of Barometer.	Prevailing Winds.
	Highest.	Lowest.	Mean Max. Temp.	Mean Min. Temp.	Mean Temp. for Month.	Wet Days.	Fall.		
Auckland (lat. 36° 50' S.; long. 174° 50' E.; alt. 125 ft.)—	° Fahr.	° Fahr.	° Fahr.	° Fahr.	° Fahr.	No.	Inches.	Inches.	
January ..	80·0	54·0	74·9	62·3	68·6	15	·52	29·95	NE, W.
February ..	82·0	56·0	76·7	64·6	70·7	11	6·0	30·00	NE, NW.
March ..	78·5	51·0	73·1	61·1	67·1	13	7·61	30·01	NE, SW.
April ..	72·5	43·5	65·7	53·3	59·5	18	2·02	30·07	SW, S, NE
May ..	70·0	41·5	63·0	52·3	57·7	18	5·03	30·05	SW, NE.
June ..	66·0	39·5	59·3	50·1	54·7	22	5·10	29·99	SW, NE, W.
July ..	63·0	39·5	57·5	46·9	52·2	30	6·32	29·72	SW, W, NE.
August ..	66·0	39·0	58·8	46·7	52·8	25	5·97	30·12	SW, NW.
September ..	63·0	44·0	60·4	48·6	54·5	16	2·49	30·20	SW, NE.
October ..	68·5	46·0	63·8	52·4	58·1	19	2·19	30·07	SW, NW, NE.
November ..	75·5	49·0	67·7	55·9	61·8	14	3·71	29·99	NE, W.
December ..	76·5	52·0	69·9	57·1	63·5	19	2·83	29·82	SW, NW, NE.
Gisborne (lat. 38° 30' S.; long. 178° 3' E.; alt. 20 ft.)—									
January ..	89·0	51·0	78·5	60·7	69·6	9	3·24	..	NW, S, W.
February ..	86·0	50·0	78·1	60·0	69·0	7	2·71	..	W, SE, SW.
March ..	85·0	42·0	74·6	56·3	65·4	14	20·16	..	NW, W, NE.
April ..	75·0	37·0	65·5	48·3	56·9	9	3·25	..	W, NW, S.
May ..	72·0	34·0	64·1	46·1	55·1	14	4·78	..	W, S, SW, NE.
June ..	73·0	28·0	60·4	42·3	51·3	13	3·46	..	(Incomplete).
July ..	64·0	29·0	58·2	40·0	49·1	20	14·15	..	W, SE.
August ..	69·0	31·0	61·2	41·3	51·2	7	1·86	..	W.
September ..	73·0	32·0	63·5	44·0	53·7	5	1·63	..	W.
October ..	80·0	33·0	69·7	49·0	59·3	9	0·47	..	W, NW.
November ..	82·0	37·0	71·9	52·0	61·9	10	2·74	..	S, W.
December ..	84·0	44·0	71·4	53·2	62·3	11	2·09	..	S, W.

Stations and Months.	Temperatures in Shade.					Rainfall.		Mean Height of Barometer.	Prevailing Winds.
	Highest.	Lowest.	Mean Max. Temp.	Mean Min. Temp.	Mean Temp. for Month.	Wet Days.	Fall.		
Meeanee (lat. 39° 32' 38" S.; long. 176° 53' 20" E.; alt. 14 ft.)—	° Fahr.	° Fahr.	° Fahr.	° Fahr.	° Fahr.	No.	Inches.	Inches.	
January ..	85.0	50.0	75.2	58.3	66.7	8	3.29	29.958	E, NW.
February ..	84.7	48.5	74.6	57.9	66.2	8	2.83	30.087	SW, N.
March ..	83.6	40.0	71.4	54.6	63.0	12	8.27	30.103	N.
April ..	75.0	37.3	64.8	45.1	54.9	8	1.40	30.071	SW.
May ..	69.0	30.5	62.7	43.7	53.2	6	2.08	30.086	S.
June ..	70.4	29.2	58.1	39.8	48.9	8	1.34	30.028	SW.
July ..	64.3	27.5	54.6	38.7	46.6	18	10.21	29.743	SW.
August ..	69.0	31.0	59.5	39.4	49.4	9	1.25	30.163	NW.
September ..	72.7	32.0	62.5	41.9	52.2	5	1.61	30.178	N, NW.
October ..	75.0	30.6	67.3	47.0	57.1	6	0.23	30.040	NE, NW.
November ..	82.0	36.1	69.9	52.1	61.0	10	1.71	30.041	NE.
December ..	82.0	44.0	70.9	52.7	61.8	13	2.05	29.824	SW, NE.
New Plymouth (lat. 39° 3' 35" S.; long. 174° 4' 58" E.; alt. 63 ft.)—									
January ..	80.0	49.0	73.8	59.4	66.6	14	8.03	..	W, N.
February ..	80.0	51.0	76.2	61.0	68.6	11	4.56	..	W, N.
March ..	82.0	50.0	74.5	58.7	66.6	15	3.69	..	W, SE, E.
April ..	78.0	42.0	70.3	51.1	60.7	14	1.64	..	W, S.
May ..	73.0	37.0	66.9	50.8	58.8	21	3.26	..	SE, W, E.
June ..	71.0	35.0	64.8	47.0	55.9	23	4.95	..	SE, SW.
July ..	71.0	35.0	62.6	43.8	53.2	25	4.99	..	SE, SW.
August ..	73.0	36.0	65.4	46.0	55.7	26	6.45	..	SW, SE, NW.
September ..	73.0	38.0	66.5	47.2	56.8	16	2.65	..	SW, W.
October ..	74.0	41.0	69.5	51.4	60.4	18	5.72	..	NW, SW.
November ..	77.0	46.0	72.4	53.4	62.9	10	3.52	..	SW, SE, W.
December ..	78.0	42.0	73.4	53.9	63.6	18	6.79	..	W, SW, E.
Levin (lat. 40° 37' 30" S.; long. 175° 17' 13" E.; alt. 115 ft.)—									
January ..	82.5	45.6	74.6	56.2	65.4	15	6.81	..	NW, N.
February ..	84.0	42.8	77.0	56.5	66.8	6	2.27	..	N, NW.
March ..	82.0	36.0	72.4	52.5	62.4	8	2.03	..	NW, N.
April ..	75.0	32.8	66.4	44.9	55.6	8	1.02	..	N, NE, NW.
May ..	70.8	29.5	62.0	46.3	54.1	17	3.21	..	N, NE, W, NW.
June ..	67.6	30.5	57.7	44.4	51.0	19	4.36	..	NE, E.
July ..	59.8	27.5	54.6	38.9	46.7	17	2.99	..	NE, E.
August ..	65.2	28.2	57.0	40.7	48.8	22	4.10	..	NE, NW.
September ..	66.4	34.2	60.9	43.1	52.0	15	1.65	..	W, NE, E, NW
October ..	69.0	32.0	63.3	48.2	55.7	21	4.90	..	NW, W, NE.
November ..	82.0	36.2	69.9	48.9	59.4	10	2.84	..	N, NW.
December ..	80.0	38.8	72.9	52.0	62.4	16	2.62	..	W, NE.

Stations and Months.	Temperatures in Shade.					Rainfall.		Mean Height of Barometer.	Prevailing Winds.
	Highest.	Lowest.	Mean Max. Temp.	Mean Min. Temp.	Mean Temp. for Month.	Wet Days.	Fall.		
Wellington (lat. 41° 16' 25" S.; long. 174° 46' 20" E.; alt. 110 ft.)—	° Fahr.	° Fahr.	° Fahr.	° Fahr.	° Fahr.	No.	Inches.	Inches.	
January ..	75·0	49·2	68·6	57·4	63·0	13	6·00	29·925	N, SE.
February ..	78·2	49·8	70·7	58·5	64·6	7	4·25	30·055	N, S.
March ..	77·4	48·0	67·9	56·5	62·2	16	2·39	30·087	N, S.
April ..	66·6	44·8	61·3	50·8	56·1	11	1·88	30·032	N, S.
May ..	65·2	37·8	59·1	49·8	54·4	15	3·35	30·032	N, S.
June ..	63·0	40·0	54·5	45·9	50·2	17	8·09	29·983	N, S.
July ..	58·8	36·0	51·8	42·3	47·1	18	2·76	29·742	N, S.
August ..	59·2	35·2	54·2	45·2	49·7	19	4·65	30·022	N, S.
September ..	62·0	37·0	57·9	46·3	52·1	7	0·60	30·148	N.
October ..	65·0	40·0	59·8	51·3	55·5	14	3·95	29·962	N.
November ..	76·0	42·2	64·8	53·0	58·9	9	3·91	30·014	N, S.
December ..	72·5	44·6	66·3	54·9	60·6	15	3·59	29·821	N, S.
Nelson (lat. 41° 16' 17" S.; long. 173° 18' 46" E.; alt. 34 ft.)—									
January ..	82·0	50·0	76·2	58·5	67·3	11	4·56	..	SW, NW, N.
February ..	82·0	52·0	76·2	57·6	66·9	8	3·82	..	SW, NE, SE.
March ..	79·0	36·0	72·0	54·1	63·0	11	2·58	..	SW, E.
April ..	73·0	37·0	66·5	45·4	56·0	6	0·60	..	SW.
May ..	67·0	34·0	60·5	45·3	52·9	13	2·92	..	SW.
June ..	61·0	29·0	55·5	40·0	47·7	11	8·23	..	SW.
July ..	59·0	31·0	53·1	38·5	45·8	15	2·38	..	SE, SW.
August ..	63·0	31·0	56·9	39·5	48·2	11	5·34	..	SW.
September ..	65·0	36·0	61·0	40·4	50·7	8	1·00	..	SW.
October ..	70·0	35·0	63·6	47·7	55·6	18	5·28	..	SW, N, NE.
November ..	80·0	42·0	70·6	51·0	60·8	6	1·99	..	SW, NE, NW.
December ..	81·0	45·0	72·3	52·6	62·4	14	2·26	..	N, SW, SE.
Hokitika (lat. 42° 41' 30" S.; long. 170° 49' E.; alt. 12 ft.)—									
January ..	77·0	45·0	69·1	54·2	61·7	17	12·18	29·926	SW, NW.
February ..	77·0	48·0	72·8	54·4	63·6	8	5·44	30·054	SW.
March ..	76·0	35·0	69·3	50·1	59·7	15	9·33	30·079	E, NW, SW.
April ..	73·0	33·0	63·6	43·5	53·6	19	12·34	30·032	SW, E, NE.
May ..	69·0	31·0	60·9	43·7	52·3	21	13·79	30·021	NE, E, SW.
June ..	63·0	32·0	57·4	40·7	49·0	22	12·36	29·973	NE, E,
July ..	62·0	29·0	55·5	36·5	46·0	15	3·41	29·729	E.
August ..	60·0	32·0	55·7	41·3	48·5	26	17·89	30·011	E, NE, SW.
September ..	62·0	34·0	57·5	42·1	49·8	17	11·65	30·166	E, NE.
October ..	66·0	38·0	59·7	48·5	54·1	25	16·39	29·944	SW, NW, NE.
November ..	76·0	39·0	64·7	49·6	57·2	8	7·80	30·020	SW, NW.
December ..	87·0	45·0	71·1	53·0	62·1	11	10·19	29·805	SW, NW.

Stations and Months.	Temperatures in Shade.					Rainfall.		Mean Height of Barometer.	Prevailing Winds.
	Highest.	Lowest.	Mean Max. Temp.	Mean Min. Temp.	Mean Temp. for Month.	Wet Days.	Fall.		
Christchurch (lat. 43° 31' 50" S.; long. 172° 38' 9" E.; alt. 25 ft.)—	° Fahr.	° Fahr.	° Fahr.	° Fahr.	° Fahr.	No.	Inches.	Inches.	
January ..	85·8	45·2	69·0	54·4	61·7	12	4·21	29·919	NE, SW E.
February ..	88·0	45·7	72·5	54·4	63·5	4	0·78	30·017	NE, SW.
March ..	85·2	33·6	66·6	50·1	58·4	14	3·65	30·056	NE, SW.
April ..	73·1	25·6	61·6	41·8	51·7	7	0·23	29·941	NE.
May ..	71·2	28·4	58·6	40·4	49·5	10	1·36	29·966	NE, SW.
June ..	65·2	26·6	52·5	35·9	44·2	18	3·06	29·940	SW, NE.
July ..	60·2	24·0	48·5	35·1	41·8	20	6·04	29·781	SW, E.
August ..	67·9	28·3	54·8	36·7	45·6	12	1·89	29·947	NE, SW, NW.
September ..	71·8	29·2	60·3	38·7	49·5	3	0·29	30·040	NE, NW, E.
October ..	78·0	28·4	66·8	44·5	55·6	4	0·21	29·846	NE, SW, NW.
November ..	81·2	37·3	69·3	48·0	58·6	7	0·54	29·971	NE.
December ..	81·2	44·0	68·2	52·0	60·1	11	2·94	29·786	NE, SW.
Hanmer (lat. 42° 31' S.; long. 172° 50' E.; alt. 1,220 ft.)—									
January ..	90·0	43·0	72·5	52·7	62·6	11	5·92	..	NW, SW.
February ..	84·5	39·0	76·3	51·7	64·0	2	1·15	..	SW, NW.
March ..	81·0	29·0	67·8	48·2	58·0	13	4·41	..	NW, SW.
April ..	73·0	27·0	62·2	40·7	51·4	8	3·63	..	NW.
May ..	72·0	25·0	58·6	41·4	50·0	11	3·12	..	NW, SW.
June ..	70·5	20·2	52·9	34·1	43·5	13	4·74	..	NW, NE.
July ..	56·0	21·0	45·3	31·5	38·4	16	5·32	..	SW, SE.
August ..	65·0	21·5	54·3	36·2	45·2	12	3·54	..	NW, SW.
September ..	70·0	27·2	59·5	37·1	48·3	7	2·49	..	NW, SW.
October ..	70·0	32·5	63·5	44·4	54·0	6	1·11	..	NW, SW.
November ..	84·0	32·0	69·5	46·4	57·9	6	2·22	..	NW, SW.
December ..	80·0	37·0	69·2	49·2	59·2	11	5·36	..	NW, SW.
Lincoln (lat. 43° 32' 16" S.; long. 172° 38' 39" E.; alt. 42 ft.)—									
January ..	88·5	42·0	71·9	54·4	63·1	10	3·63	29·936	NE, SW.
February ..	89·4	43·5	75·1	54·5	64·8	6	0·94	30·017	NE, SW.
March ..	87·2	35·7	68·8	51·4	60·1	12	2·78	30·063	NE, SW.
April ..	74·9	24·4	63·9	43·2	53·5	7	0·72	29·927	NE.
May ..	76·0	30·3	61·3	43·0	52·1	10	1·48	29·967	NE, SW.
June ..	64·8	26·1	54·1	37·7	45·9	17	3·82	29·945	NE, SW.
July ..	62·8	24·0	49·6	35·3	42·4	16	3·97	29·789	SW, NE.
August ..	65·6	28·1	56·9	37·4	47·1	11	2·19	29·950	NE, NW, SW.
September ..	74·8	29·4	62·7	40·1	51·4	7	0·58	30·037	NE, NW, SW.
October ..	82·7	25·7	68·9	45·4	57·1	5	0·32	29·831	NE, SW, NW.
November ..	87·0	36·5	71·5	48·9	60·2	5	0·95	29·970	NE, SW.
December ..	84·2	42·5	70·0	52·1	61·0	10	2·83	29·779	NE, SW.

Stations and Months.	Temperatures in Shade.					Rainfall.		Mean Height of Barometer.	Prevailing Winds.
	Highest.	Lowest.	Mean Max. Temp.	Mean Min. Temp.	Mean Temp. for Month.	Wet Days.	Fall.		
Dunedin (lat. 45° 52' 11" S.; long. 170° 31' 7" E.; alt. 300 ft.)—	° Fahr.	° Fahr.	° Fahr.	° Fahr.	° Fahr.	No	Inches.	Inches.	
January ..	80·0	44·0	65·9	51·1	58·5	12	8·57	29·878	W, NE.
February ..	76·0	41·0	65·7	51·0	58·2	3	1·73	29·973	NE.
March ..	82·0	39·0	66·5	47·6	57·1	12	2·04	29·998	SW, NE.
April ..	69·0	32·0	59·1	40·4	49·8	9	1·95	29·877	W.
May ..	72·0	35·0	56·8	43·8	50·3	11	2·06	29·879	N, W.
June ..	65·0	33·0	58·1	39·4	46·2	12	2·28	29·882	NE, SW.
July ..	54·0	32·0	44·8	35·7	40·2	15	3·25	29·754	SW.
August ..	63·0	31·0	53·0	37·2	45·1	9	0·92	29·851	W, NE.
September ..	71·0	32·0	56·8	40·1	48·4	9	2·02	29·917	SW, W.
October ..	72·0	35·0	61·3	43·9	52·6	7	1·78	29·799	SW.
November ..	81·0	37·0	66·3	45·9	56·1	7	2·92	29·898	W.
December ..	80·0	41·0	66·7	49·7	58·2	12	4·02	29·743	SW, NW.

COMPARATIVE TABLE: YEAR 1910.

Stations.	Temperature in Shade.					Rainfall.		Mean Height of Barometer.	Prevailing Winds.
	Highest, and Date.	Lowest, and Date.	Mean Max. Temp. for Year.	Mean Min. Temp. for Year.	Mean Temp. for Year.	Days on which Rain fell.	Greatest Fall, and Date.		
Auckland ...	° Fahr. 82·0, 23 Feb.	° Fahr. 39·0, 11 Aug.	° Fahr. 65·9	° Fahr. 54·3	° Fahr. 60·1	No. 220	Inches. 3·85, 29 Mar.	Inches. ...	SW, NE.
Gisborne ...	89·0, 5 Jan.	28·0, 25 June	68·1	49·4	58·7	128	7·68, 30 Mar.	...	W, S.
Meeanee ...	85·0, 18 Jan.	27·5, 27 July	65·9	47·6	56·7	111	3·26, 30 Mar.	30·027	SW.
New Plymouth ...	82·0, 6 Mar	35·0, 22 June	69·7	51·9	60·8	211	2·86, 9 Jan.	...	SE, W, SW
Levin ...	84·0, 7 Feb.	27·5, 27 July	65·7	47·7	56·7	174	2·24, 30 Jan.	..	NW, NE, N
Wellington ...	78·2, 25 Feb.	35·2, 2 Aug.	61·4	51·0	56·2	161	2·35, 30 Jan.	29·985	N, S.
Nelson ...	82·0, 13 Jan.	29·0, 22 June	65·3	47·5	56·4	132	4·50, 27 June	...	SW.
Hokitika ...	87·0, 24 Feb.	29·0, 25 July	63·1	46·4	54·8	204	3·00, 19 Dec.	29·980	SW, E.
Christchurch ...	88·0, 17 Dec.	24·0, 12 July	62·4	44·3	53·3	122	1·75, 12 July	29·934	NE, SW.
Hanmer ...	90·0, 27 Feb.	21·0, 10 July	62·6	42·8	52·7	115	2·40, 8 Dec.	...	NW, SW.
Lincoln ...	89·4, 27 Feb.	24·0, 10 July	64·5	45·3	54·9	116	1·27, 31 Jan.	29·934	NE, SW.
Dunedin ...	82·0, 10 Mar.	31·0, 2 Aug.	59·6	43·9	51	118	2·70, 17 Jan.	29·871	W, SW.

AVERAGES derived from the MONTHLY CLIMATOLOGICAL TABLES from August, 1904, to December, 1910 (inclusive).

---	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Averages.
<i>North Island—</i>													
Mean temperature ..	63.6	64.0	62.3	57.3	53.4	49.8	48.3	49.0	51.8	54.9	58.4	61.6	56.2° Fahr.
Rainfall, in points (100 = 1 in.)	392	299	550	362	496	461	600	452	423	460	328	358	51.81 in.
Days with rain ..	10.5	8.0	12.4	12.6	14.8	15.8	17.8	14.4	16.3	16.0	12.5	12.1	163 days.
<i>South Island—</i>													
Mean temperature ..	59.9	60.9	58.7	52.6	48.9	44.5	42.3	44.5	48.7	52.2	55.8	59.0	52.3° Fahr.
Rainfall, in points (100 = 1 in.)	392	239	448	336	368	452	418	379	433	435	297	391	45.88 in.
Days with rain ..	12.5	7.4	12.6	12.3	12.1	13.7	14.0	14.2	15.5	15.9	12.6	13.6	156 days.

The following table, compiled from information published in the Statistical Abstract for the Colonial Possessions of the United Kingdom, shows the means of the extreme maximum and minimum shade temperature for each month in New Zealand and other British States and Colonies. The figures given are the means of the extreme maximum and minimum of four years (H signifies highest, and L lowest):—

	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Year.	
	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.
British Possessions (Stations and Height in Feet above Sea-level where known).																										
New Zealand—																										
Wellington (110) ...	76	46	77	50	75	47	68	42	64	40	61	38	59	37	60	37	64	38	64	39	71	43	73	47	77	37
Queensland—																										
Brisbane (130) ...	92	64	93	63	91	61	85	54	80	50	76	42	5	39	78	41	85	46	91	50	94	57	97	61	97	39
New South Wales—																										
Sydney (155) ...	92	59	89	58	84	59	79	51	72	48	67	44	63	39	70	42	77	45	88	48	87	54	94	57	94	39
Victoria—																										
Melbourne (91) ...	101	48	99	47	99	45	86	40	74	37	64	37	62	32	68	34	74	34	81	40	94	44	96	45	101	32
South Australia—																										
Adelaide (140) ...	108	49	106	50	100	48	89	45	78	40	67	38	65	36	74	39	79	41	86	41	96	45	101	48	108	36
Western Australia—																										
Perth (47) ...	107	50	102	53	98	52	96	57	81	40	70	38	70	37	73	38	80	42	83	42	93	48	100	51	107	37
Tasmania—																										
Hobart (160) ...	91	45	94	45	93	44	75	38	71	37	61	34	59	33	66	33	72	35	77	35	92	40	86	43	94	33
Natal—																										
Durban (150) ...	99	63	95	61	94	60	94	58	89	52	86	49	88	48	91	49	96	50	91	53	97	57	98	59	99	49
Cape Town—																										
Royal Observatory (37) ...	94	54	90	51	92	49	86	45	80	42	76	39	74	37	76	37	83	39	86	44	89	48	90	52	94	37
Hong Kong—																										
Observatory (110) ...	73	47	78	46	77	49	84	58	89	68	91	73	91	74	91	74	92	70	90	66	82	55	79	4	91	46
Straits Settlements—																										
Singapore (80) ...	88	70	90	70	91	71	91	73	90	73	90	72	90	72	89	72	89	71	89	71	89	71	89	70	91	70
Mauritius—																										
Royal Alfred Observatory (179) ...	84	69	84	71	84	70	82	70	80	62	77	60	75	59	75	59	77	62	80	62	82	66	84	68	84	59
Canada—																										
Toronto (350) ...	47	-3	45	-3	51	6	71	22	78	31	86	44	88	46	89	47	82	41	71	27	56	13	45	-1	88	-3
Montreal (187) ...	45	-14	42	-13	44	0	69	24	81	32	87	43	88	50	86	50	81	39	70	27	59	11	43	-11	88	-14
St. John (N.B.) (116) ...	49	-7	46	-7	47	4	62	22	69	33	81	42	79	47	78	48	73	37	60	26	56	16	49	-3	81	-7
Halifax (122) ...	50	-1	46	-3	50	10	63	22	73	32	83	39	84	48	84	49	80	36	69	29	60	21	51	3	84	-3
Charlottetown, Prince Edward Island (34) ...	47	-6	43	-9	47	5	60	20	70	31	77	39	80	49	79	49	75	39	66	30	58	19	47	1	80	-9
Winnipeg, Manitoba (764) ...	34	-37	32	-37	49	-25	76	8	82	20	90	35	87	40	91	34	86	30	73	17	53	-16	39	-29	91	-37
Victoria, British Columbia (10) ...	51	14	55	22	60	30	67	19	73	38	76	39	79	43	76	41	71	38	64	35	55	30	51	23	79	14
St. John's, Newfoundland (125) ...	46	-6	50	-8	50	11	61	25	71	37	76	33	81	43	79	42	78	33	65	24	62	19	51	9	81	-8
Barbados—																										
Joos River (430) ...	81	67	81	67	83	69	84	70	84	71	85	72	84	70	85	70	85	71	85	71	84	70	83	69	85	67
Bahamas—																										
Military Hospital	77	63	79	68	79	67	84	69	89	72	88	73	89	78	89	73	87	75	86	77	82	70	77	67	89	63
Jamaica—																										
Kingston (60) ...	91	63	90	63	90	63	91	68	91	70	92	71	95	71	93	73	92	70	93	69	91	67	90	63	95	62
Trinidad (130) ...	86	67	87	68	88	69	88	70	89	70	86	71	86	71	86	70	89	70	88	70	87	70	85	69	82	67



(METEOROLOGICAL OFFICE.)

MEAN ANNUAL RAINFALL MAP OF NEW ZEALAND.

The relative amount of Rainfall is shown
by intensity of shading.

Under 20 inches, thus:—

"	30	"	"
"	40	"	"
"	50	"	"
"	70	"	"
"	100	"	"
Over 100	"	"	"



C. Maria v. Diemen

Russell

Kaipara Har.

AUCKLAND

Tauranga

East C.

Taupo

Gisborne

New Plymouth

Napier

Wanganui

D.C. Bates.

Director. 7. vi. 1911.

C. Farewell

Nelson

Westport

C. Campbell

WELLINGTON

Hokitika

Beauly

CHRISTCHURCH

Timaru

Queenstown

Oamaru

DUNEDIN

Invercargill

Bluff

STEWART I.

NEW ZEALAND RAINFALL.

[By D. C. BATES, Director, Meteorological Office.]

THE rainfall map of New Zealand presents striking conformation to its physical configuration, and records gathered throughout the country during a period of sixty years present a certain regularity which brings out the dominating influence of the mountain ranges over the rainfall. The lofty Southern Alps rising to heights of from ten to twelve thousand feet on the western side of the South Island lie broadside to the prevailing westerly winds, and on their windward slopes are condensed the vapours which have been swept by the breezes over vast stretches of ocean wave. On the plains at the margin near the foot of the ranges and on their rugged and precipitous slopes the rainfall averages from one to two hundred inches per annum, while on the lee side of this formidable chain the climate is comparatively very dry, and in parts the rainfall is only about one-tenth of what is recorded on the other side. The manner in which the sea breezes are robbed of their moisture is occasionally manifested when a strong and steady westerly wind blows along, parallel with the southern latitudes. Heavy and continuous then is the rain on the west coast, and the clouds and mist may rise to the summit, but no further. There the winds are forced onwards and rush downwards to the greatest plains in New Zealand which have been built up of the detritus of the mountains. Here, however, the characteristics of this westerly wind have been entirely changed, for it is now hot by compression, and dry because it gave off its moisture when it rose above sea-level away back among the hills. Instead of parting with superfluous humidity, it is now capable of sustaining the vapour of water, and nature seeks to restore the balance of its relative humidity by evaporating what moisture it can from stream and lake, vegetation or animal life in its path. These hot and dry "nor'westers" of the Canterbury Plains are the well-known *Foehn* winds such as are experienced in Austria, Switzerland, and Italy, but they illustrate and account for much of the comparative shortage of rainfall on the eastern side of the South Island which is manifest in the map.

While the South Island isohyets or rain-bands of equal rainfall stretch north and south, the North Island tracings are more irregular in form, but show that the rainfall itself is more regular over the country and less extreme in comparison between different districts. Here, again, however, the control of the mountains and plains over precipitation is apparent. The contours of the rainfall

areas are found to coincide more or less with the configuration of the country—dark-tinted spots showing heavier rainfalls are found in proximity to Mount Egmont, the Tongariro, Tararua, Raukumara, and other ranges.

The mean annual rainfall of New Zealand, derived from means of representative stations in various parts of the whole country, is about 50 in., but the seasonal falls are different in various districts. The season of greatest fall in the North Island, which is mostly under the influence of subtropical conditions, is winter, and the month of July shows not only the lowest mean temperature but the mean maximum rainfall, and is regarded as the midwinter month in the Southern Hemisphere. In the South Island late autumn, winter, and early spring are frequently dry, while the summer sometimes suffers from too frequent showers. This is the case on the east coast and southernmost portions of the South Island, but at this time the west coast occasionally is even in want of rain, in fact the west and east coasts of the South Island are so different that if the east coast has more than the average rainfall the west coast has less, and *vice versa*. The average monthly rainfall of the year is remarkably even in the South Island, but the midwinter month's mean in the North Island is one-third greater than the mean of the midsummer month (February).

The weather is full of vagaries in the temperate zones of both hemispheres, and New Zealand is not the only country which occasionally experiences a touch of winter in summer, but there is also very much summerlike weather in the winter-time. Occasional winter storms account for temporary high winds and heavy rainfalls, but the monthly averages show that less wind is experienced in the season of winter, particularly in the south.

The seasons usually differ considerably in several characteristics from year to year, and the annual rainfalls are found to range considerably above and below the means in all parts of the Dominion. From month to month also, and by comparing the records of months of the same name in different years are seen surprising contrasts and periodic changes which evade general laws, and the approximately true mean rainfalls are only ascertained through averages derived from returns extending over many years.

The abundance and frequency of the rainfall are, however, the leading features in the climate of New Zealand as a whole. The position of the Islands with vast oceans on every side, and the proximity of every part of the country to the sea combined with frequent atmospheric changes, usually causes all parts of the Dominion to be favoured with beneficent rains, and very rarely indeed does the rainfall report from any station in the Dominion make the return of "Nil." Nine out of ten of the stations throughout the country have never recorded months of such absolute drought, and on the other hand very few are the records showing

rainfall every day during any month of their registrations. Sunshine and rain alternate fairly well throughout the year with much greater predominance of the former. The rainfall again is usually more intense and frequent at night than in the hours when the sun exercises its influence over air and earth and sea, for then "Maui is drawing water."

NEW ZEALAND RAINFALL, 1910.

[By D. C. BATES, Director, Meteorological Office.]

THE rainfall for the year 1910 in New Zealand was everywhere below the average, except in one or two places on the west coast of the South Island. Taking the average of the monthly means for six years from representative stations in various parts of the North and South Islands respectively, and comparing the means for similar stations in 1910, we find that in January, February, March, and July the rainfall was in excess in the North Island, but in the South Island January only showed an excessive rainfall and June an average, while the remaining ten months were deficient. The following tables give the results both for the amount of rainfall and the number of days with rain ($\cdot 005''$ or over):—

NORTH ISLAND RAINFALL.

MEANS FOR 1910, COMPARED WITH THE AVERAGES FOR SIX YEARS.

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
+5.45	4.60	6.90	..	..	..	6.93	..	..	..	..	..
Av. 3.92	2.99	5.50	3.62	4.96	4.61	6.00	4.52	4.23	4.60	3.28	3.58
- ..	..	..	1.99	4.78	4.56	..	4.18	2.18	3.32	2.97	..

MEAN NUMBER OF DAYS WITH RAIN, COMPARED WITH THE AVERAGES FOR SIX YEARS.

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
+ 12.9	8.8	12.6	..	..	16.8	20.5	17.0	..	..	..	14.8
Av. 10.5	8.0	12.4	12.6	14.8	15.8	17.8	14.4	16.3	16.0	12.5	12.1
- ..	..	..	10.5	14.5	..	..	..	11.0	13.4	10.1	..

+ Above the average.

- Below the average.

SOUTH ISLAND RAINFALL, 1910.

MONTHLY MEANS, COMPARED WITH THE AVERAGES FOR SIX YEARS.

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
+ 5.41	..	..	..	..	..	..	..	..	..	..	..
Av. 3.92	2.39	4.48	3.36	3.68	4.52	4.18	3.79	4.33	4.35	2.97	3.91
.. ..	1.99	3.39	2.61	3.11	..	3.44	3.75	2.75	3.36	2.11	3.78

MEAN NUMBER OF DAYS WITH RAIN, COMPARED WITH THE AVERAGES FOR SIX YEARS.

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
+ 13.6	..	..	..	..	16.8	15.7	..	..	..	..	..
Av. 12.5	7.4	12.6	12.3	12.1	13.7	14.0	14.2	15.5	15.9	12.6	13.6
.. ..	5.5	12.1	9.3	11.5	..	..	13.5	9.8	10.7	6.9	13.0

+ Above the average.

- Below the average.

Precipitation generally accompanies marked atmospheric disturbance, and because the barometer is our chief, though indirect and by no means infallible, guide to weather prediction, its movements are always correlated by the meteorologist with the rainfall which occurs according to its readings. Thus the low-pressure systems, wherein the barometer sinks below the normal, are generally found to coincide more or less with rainfall areas. The barometer falling below normal, when low, and the barometer rising to the normal are thus often associated with foul weather, while the high barometer of the anti-cyclonic system is usually, but by no means always, associated with fair weather.

Of the low-pressure systems causing precipitation the most notable during the year was the cyclone which passed in the north on the 30th and 31st March, causing torrential downpours on all the east coast districts, with floods northward of Castlepoint. The heaviest rainfall during the passage of this remarkably intense cyclone was recorded at Waihi, when 12 in. fell in twelve hours. As a result of this disturbance the rainfall was greatly above the average for March in all parts of the North Island, with the exception of Taranaki and the country in the vicinity of Wellington City. In the South Island during the month of March the rainfall reached about the average.

In January all districts except Southland recorded an excess of the mean, which was principally accounted for by heavy rainfall

accompanying a cyclonic disturbance of a milder type, but whose centre passed over the North Island. The effect of this, however, did not reach so far south as Southland.

The month of February gave an excessive fall to the Marlborough and Nelson districts and also to those provinces lying northward of New Plymouth and East Cape, but to all other parts of the Dominion a considerable deficiency.

The main meteorological feature during April was an intense antarctic low-pressure system which passed in the south on the 15th with a minimum barometric pressure of 28.64 in. at the Bluff. On account of this the west coast and southernmost districts of the South Island recorded a good monthly rainfall, somewhat above the average; but the fall for the month was elsewhere below the mean, generally about 42 per cent. Again, in May, the west coast of the South Island exceeded the mean for the month, owing to an extensive westerly area of low pressure in the south, which ultimately enveloped the whole country. Low pressures of this type cause precipitation on the west coast, not only on their approach, when the winds are from the north and west, and when the east coast districts receive little or no rainfall, but when the lowest pressure has passed in the south and the winds change to southerly the west coast is still under the influence of rain-bearing winds. Thus, whereas the east coast benefits only in the rear of a westerly "low," the west derives precipitation both from the front and the rear of the same disturbance.

The northernmost districts were affected during May month by a monsoonal depression between the 7th and 12th, which brought very heavy rain and consequently an excess for these parts. Elsewhere it was below the mean for the month, and especially in South Canterbury and Otago.

The three winter months, June, July, and August, were subject, as is usual, to frequent atmospheric disturbances, both of the westerly low-pressure and cyclonic type, as during these months the high-pressure systems pass further north, which permits the passage of the low-pressure system across these Islands. In all three months, and in fact right to the end of the year, the Oamaru and some parts of the Central Otago districts showed a decrease from the average for each month. In June there was an excess throughout the North Island and in the north and west coast districts of the south; July gave an excess on the eastern coast of both Islands northward of Timaru, but in August, with the exception of the districts about Cape Egmont, and the west coast of the South Island, the rainfall was generally below the average. Both in June and July snowfalls were frequent and heavy at times in parts of the the South Island and on the higher levels in the North.

September was generally a dry month, but the west coast of the South Island again recorded rainfall slightly above the average. In October, too, the rainfall was generally below the average except in parts of the west coast. In September and October there was a

remarkable absence of ex-tropical disturbances both of monsoonal and cyclonic types, and as these atmospheric movements are principally responsible for the rainfall of the districts bordering the east coasts of both Islands, there was consequently an unusual deficiency in the rainfall of these parts.

November only brought disturbances of a very moderate character, chiefly affecting the far North and the west coast of the South Island where precipitation slightly exceeded the average, but in all other parts the total monthly fall did not reach the average for the month.

During December, electrical disturbances and frequent showers were much in evidence, but the rainfall was again generally below the mean, although some exceptional falls accompanying thunderstorms were recorded at scattered districts.

Of the particular stations, those showing the greatest excess of the average for the year are Otira, with an increase of 32·56 in., Bealey 20·98 in., Denniston 24·51 in., and Hokitika 16·68 in., while those recording the greatest deficiency are Puysegur Point with 23·67 in. below the average, Opoho, Dunedin, 12·66 in., and Wainui-o-mata 12·39 in. The maximum monthly fall from stations recording rainfall was at Mountain House, Mount Egmont, where 38·09 in. fell during the month of August, and the minimum fall of 0·11 in. was recorded at Napier for the month of October. The stations showing the greatest difference in the fall for the year are the Mountain House, Mount Egmont, with 298·62 in., and Galloway, Alexandra South, with a fall of only 12·11 in. The latter lies in a valley enclosed by mountain ranges on every side, while the former station, besides being at a considerable altitude (3,140 ft.), has also a westerly aspect, and these two facts combined account for its abnormal annual rainfall.

SECTION X.—TRANSPORT AND COMMUNICATION.

NEW ZEALAND'S insularity, ruggedness of form, length of coastline, and numerous ports, combine to render carriage by water necessary, convenient, and economical; while a large and increasing trade attracts and engages the services of a fleet of first-class merchantmen for both home and oversea transport.

Internal traffic is by means of roads and railways, very few of the rivers being navigable for any distance by cargo-carrying vessels. The mountainous nature of the country and the abundant rainfall renders the construction of roads and railways difficult and costly, but in spite of this drawback, and considering how recently settlement began, it may truly be said that the country is well supplied with excellent facilities for internal transport, while the works under construction and contemplated will open up considerable areas of unoccupied lands, and amply provide for the needs of a large population. There are two cable services connecting New Zealand with the other countries of the world. Postal and internal telegraphic communication, controlled by the State, is provided abundantly and cheaply. Telephone exchanges have been established by the Postal Department in most of the centres of population, and the chief towns on the main telegraph routes are connected for long-distance conversations.

SHIPPING.

The demands of a rapidly growing external trade have, during the past ten years, attracted the service of vessels of largely increased tonnage. In 1901 the steam-vessels entered inward from the United Kingdom with cargoes numbered 56, with an average of 3,689 tons net register, and in 1910 the number was 91 vessels, averaging 4,840 tons.

In 1901 the total number of oversea steam-vessels entered inward was 438, with a total net register of 920,883 tons, an average for each vessel of 2,102 tons. In 1910 the oversea steamers entered numbered 475, with a total of 1,317,284 tons net, an average of 2,773 tons per vessel. In the former year the number of oversea sailing-ships entered was 250, with a total of 142,391 tons, as against 134 ships and 71,747 tons in 1910.

The number of oversea vessels entered and cleared, their aggregate net tonnage and crews, classified into British, colonial, and foreign, during each of the past ten years, is as follows :—

VESSELS ENTERED, 1901-1910.

Year.	Total Number.			British.			Colonial.			Foreign.		
	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.
1901	688	1,063,274	29,724	175	448,688	7,713	441	461,729	16,063	72	152,857	5,948
1902	688	1,089,179	30,264	172	496,203	8,871	395	429,467	15,305	71	163,509	6,088
1903	617	1,102,064	30,600	145	455,741	7,799	403	478,419	16,497	69	167,904	6,304
1904	629	1,154,569	31,478	149	495,667	8,548	410	496,427	16,901	70	162,475	6,029
1905	627	1,139,410	31,429	130	462,851	8,005	423	500,467	17,187	74	176,092	6,237
1906	629	1,243,652	32,528	152	548,142	9,212	408	542,271	18,042	69	153,239	5,274
1907	645	1,254,266	31,425	194	636,456	11,161	400	548,916	18,136	51	68,894	2,128
1908	658	1,361,047	32,681	193	684,144	11,486	419	629,428	20,378	46	47,475	817
1909	605	1,263,935	31,487	155	587,235	10,349	407	633,813	20,392	43	42,887	746
1910	609	1,389,031	33,857	186	703,244	12,818	385	643,128	20,400	38	42,659	639

VESSELS CLEARED, 1901-1910.

Year.	Total Number.			British.			Colonial.			Foreign.		
	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.
1901 ..	691	1,075,906	30,028	177	462,179	7,954	441	458,994	16,106	73	154,733	5,968
1902 ..	611	1,048,770	29,294	152	447,351	7,983	385	437,489	15,171	74	163,930	6,140
1903 ..	608	1,113,165	30,660	141	462,122	7,890	401	485,337	16,503	66	165,706	6,267
1904 ..	620	1,144,764	31,049	146	487,961	8,341	403	493,270	16,659	71	163,533	6,049
1905 ..	627	1,141,552	31,219	130	465,171	8,039	421	500,371	16,941	76	176,010	6,239
1906 ..	631	1,238,214	32,237	149	538,494	8,775	413	545,026	18,173	69	154,694	5,289
1907 ..	615	1,225,382	30,840	185	625,006	10,864	383	537,234	17,918	47	63,142	2,058
1908 ..	656	1,331,305	31,865	194	682,357	11,196	408	594,842	19,734	54	54,106	935
1909 ..	596	1,253,878	30,986	152	572,384	9,958	406	641,055	20,345	38	40,439	683
1910 ..	588	1,367,207	33,591	181	688,143	12,629	371	637,513	20,350	36	41,551	612

NOTE—Coasting-vessels are not included in the above table.

SHIPPING ENTERED AND CLEARED FROM AND TO VARIOUS COUNTRIES.

Particulars of the number and net tonnage of vessels entered and cleared between New Zealand and various countries during the years 1901 and 1910 are given below:—

ENTERED.

Country.	1901.				1910.			
	Steam.		Sailing.		Steam.		Sailing.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
United Kingdom ..	56	206,593	24	26,517	99	450,387	5	4,995
New South Wales..	191	344,316	124	45,775	196	434,567	68	24,121
Victoria ..	63	112,091	11	5,960	61	147,946	9	5,395
Queensland	4	7,383	2	2,498	1	5,442	2	284
South Australia ..	1	1,984	12	7,217	7	10,110	8	4,529
Western Australia	..	..	1	325	5	10,394	1	1,000
Tasmania ..	2	2,713	16	4,488	6	5,454	10	3,068
Fiji ..	28	26,060	3	2,859	24	46,784	..	..
Norfolk Island	2	410	..	..	5	960	..	..
Cape Colony ..	6	16,772	10	12,466	1	404	3	2,815
Natal ..	8	19,321	4	3,451	..	..	1	934
Bengal ..	4	12,136	2	1,876	6	21,071	..	..
Canada ..	1	1,897	..	..	6	21,697	1	785
France ..	..	..	..	..	..	..	3	3,852
Germany ..	..	..	2	1,366	..	..	..	..
United States of America—								
East Coast ..	14	40,975	5	3,629	19	63,331	3	5,354
West Coast ..	19	67,798	..	..	11	29,134	2	2,855
Pacific Islands	31	42,591	21	9,843	19	42,328	13	7,662
Other countries ..	8	17,843	13	14,125	9	27,275	5	4,098
Totals ..	438	920,883	250	142,391	475	1,317,284	134	71,747

CLEARED.

Country.	1901.				1910.			
	St am.		Sailing.		Steam.		Sailing.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
United Kingdom ..	65	242,692	45	56,282	106	480,809	8	8,140
New South Wales	180	333,101	107	35,325	199	482,942	67	33,838
Victoria ..	73	115,014	39	17,094	86	181,342	18	9,420
Queensland	..	..	1	157	10	38,364	2	388
South Australia ..	..	..	7	3,343	4	7,048	5	4,382
Western Australia	5	9,200	3	1,296	1	1,194	..	..
Tasmania ..	2	1,650	4	1,109	3	4,869	6	1,289
Fiji ..	21	22,854	1	13	18	29,871	..	..
Norfolk Island	3	1,235	..	..	4	905	..	..
Malden Island ..	..	..	8	5,854	..	..	3	2,366

CLEARED—continued.

Country.	1901.				1910.			
	Steam.		Sailing		Steam.		Sailing.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
Cape Colony ..	4	11,945	3	2,642	..	..	..	..
Natal ..	35	80,722	5	2,752	..	..	..	..
France ..	..	..	..	..	1	3,074	..	..
United States of America—								
East Coast ..	5	15,638	5	3,629	..	..	..	..
West Coast ..	17	62,018	1	991	3	7,451	..	..
Chili ..	..	..	..	..	5	13,333	..	..
Pacific Islands ..	30	28,629	14	5,219	21	42,288	15	8,302
Other countries ..	7	15,041	1	461	3	5,592	..	..
Totals ..	447	939,739	244	136,167	464	1,299,082	124	68,125

OVERSEA SHIPPING.—TONNAGE AT VARIOUS PORTS, 1901 AND 1910.

The net tonnage of oversea shipping entered and cleared at the various ports during the years 1901 and 1910 is given in the next table. Vessels arriving from abroad are recorded at the first port of call, and those departing oversea are cleared at the port from which they finally sail:—

Port.	1901.		1910.	
	Entered.	Cleared.	Entered.	Cleared.
	Tons.	Tons.	Tons.	Tons.
Auckland ..	421,892	314,113	645,063	363,306
Kaipara ..	14,141	52,683	8,907	38,067
Poverty Bay ..	3,363	4,888	8,420	1,150
New Plymouth ..	..	..	1,259	760
Waitara ..	..	..	3,934	..
Wanganui ..	1,020	547	2,288	1,208
Wellington ..	277,719	313,435	384,197	532,821
Napier ..	5,549	11,035	4,978	7,870
Pictou ..	150	..	1,910	1,901
Nelson ..	3,792	575	..	..
Westport ..	17,840	13,394	24,200	51,633
Greymouth ..	912	1,386	2,078	16,017
Lyttelton ..	55,918	152,558	49,769	61,437
Timaru ..	11,494	19,802	8,843	17,401
Oamaru ..	20,714	4,046	1,493	5,537
Dunedin ..	82,220	30,498	74,970	96,532
Bluff ..	146,550	156,946	166,722	171,567
Totals ..	1,063,274	1,075,906	1,389,031	1,367,207

COASTWISE SHIPPING.

As already remarked, the extensive coastline and numerous harbours of New Zealand facilitate travelling and the distribution of

goods by sea. The total tonnage of coastwise shipping, as shown below, includes that of oversea vessels which, after entry at the first port of arrival, proceed to other ports within the Dominion for the purpose of delivering and loading cargo, each movement, until the final sailing, being recorded as coastwise shipping.

SHIPPING COASTWISE, 1901.

		Entered. Tons.	Cleared. Tons.
Sailing-vessels	..	276,775	278,501
Steam-vessels	..	7,603,588	7,557,946

SHIPPING COASTWISE, 1910.

		Entered. Tons.	Cleared. Tons.
Sailing-vessels	..	342,652	241,302
Steam-vessels	..	11,839,244	11,848,680

TONNAGE ENTERED AND CLEARED AT VARIOUS PORTS, 1901 AND 1910.

Ports.	1901.		1910.	
	Tonnage entered.	Tonnage cleared.	Tonnage entered.	Tonnage cleared.
Auckland	714,106	783,616	938,653	1,232,031
Onehunga	132,165	132,015	141,588	139,694
Thames	136,148	128,175	120,301	114,900
Coromandel	36,550*	36,550*	18,786	18,786
Whangarei	96,298	94,242	140,390	140,249
Russell	42,740	42,740	60,939	60,939
Whangaroa	43,685	43,884	51,847	51,082
Mongonui	27,410	25,732	28,855	28,855
Hokianga	9,108	6,715	27,715	22,264
Whangape	..	..	10,342	8,093
Kaipara	50,511	13,308	37,561	8,262
Tauranga	23,440	23,440	47,916	46,384
Poverty Bay	396,698	396,810	617,170	630,024
New Plymouth	189,930	189,930	180,521	180,787
Waitara	45,631	45,731	82,918	86,782
Patea	10,122	10,122	20,380	20,378
Wanganui	105,817	105,969	167,063	167,986
Foxton	18,213	18,213	25,842	25,680
Wellington	1,492,427	1,455,862	2,562,959	2,402,395
Napier	513,802	513,542	815,028	813,087
Wairau	15,030	15,030	20,345	20,246
Pictou	255,504	255,623	428,771	428,836
Nelson	265,493	266,854	394,334	393,786
Westport	388,974	391,392	688,389	661,871
Greymouth	209,312	210,382	381,738	367,491
Hokitika	3,107	3,182	4,919	4,810
Lyttelton	1,394,759	1,296,219	2,105,590	2,084,145
Timaru	298,615	290,217	432,094	433,608
Oamaru	147,607	164,275	167,798	163,866
Dunedin	582,984	641,179	956,674	931,083
Invercargill and Bluff	234,177	229,498	404,470	401,582
Totals	7,880,363	7,836,447	12,081,896	12,089,982

*Approximate.

REGISTERED VESSELS.

The number and tonnage of the registered vessels belonging to the several ports on the 31st December, 1910 (distinguishing sailing-vessels and steamers), was as under:—

REGISTERED VESSELS, 31ST DECEMBER, 1910.

Ports.	Sailing-vessels.			Steam-vessels.		
	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.
Auckland	153	13,776	12,468	153	18,457	9,794
Napier	6	365	352	25	2,875	1,712
Wellington	23	3,943	3,776	42	10,588	5,307
Nelson	8	195	191	12	2,106	1,033
Lyttelton	21	5,521	5,300	14	3,747	1,544
Timaru	2	1,649	1,577	1	942	488
Dunedin	37	14,460	14,027	94	152,764	92,034
Invercargill	4	985	940	11	1,158	563
Totals	254	40,894	38,631	352	192,637	112,475

QUARANTINE.

The quarantine laws are administered by the public health officers, under authority of the Public Health Act, 1908. The Act provides for the proclamation of infected places in or beyond the Dominion, and every ship arriving at a New Zealand port from or after having touched at an infected place is liable to quarantine, and this liability extends to every person on board such ship. No person or goods are allowed to be landed from an infected ship, except at the appointed quarantine-ground, and any restrictions that may be deemed necessary to prevent the spread of infection may be enforced by the health officers. Heavy fines may be inflicted for any breach of these laws.

A medical practitioner may be appointed to take charge of passengers and crew of a ship liable to quarantine, and the owners or agents of the ship are liable for the cost of such attendance. It is the duty of the owners or agents of the ship to supply the passengers with such wholesome provisions and medicines as the medical man in charge directs or requires. All expenses incurred in connection with the disinfection or destruction of infected goods are a charge against the ship.

Regulations under the Act direct the manner by which the ship and the quarantine quarters must be disinfected, and the precautions to be taken by those on board the ship. Suspected ships are liable to the same precautions as those infected, and healthy ships—*i.e.*, those on board which there has been no case of infectious disease—though they have sailed from or touched at an infected port, or have communicated with an infected ship, are liable to fumigation if directed by the Health Officer, and the method of mooring is set out.

No vessel may be admitted to pratique between the hours of sunset and sunrise, unless under exceptional circumstances.

RAILWAYS.

The history and progress of railways in New Zealand was specially described in the Year-book of 1894, as was also the line partly built by the New Zealand Midland Railway Company. An account of the line lately belonging to the Wellington and Manawatu Railway Company was published in the Year-book for 1895.

In the year 1860 a contract was let for the construction of the first New Zealand railway. Up to the year 1870 there were only 46 miles of railway in operation. In that year the construction of railways came to be part of the public-works policy just then initiated, and the Railways Act of 1870 authorized certain lines to be made and surveys of others. In 1876 the abolition of the provinces placed the earlier-constructed railways in the hands of the General Government. At that time there were 718 miles open for traffic.

In December, 1908, the Government acquired by purchase the railway between Wellington and Longburn, eighty-four miles in length, completed in 1886 by the Wellington-Manawatu Railway Company. The entire railway system, with the exception of a few miles of private lines used for specific purposes, such as the carriage of coal, timber, or stone, is now owned and controlled by the State.

The length of Government railways open on the 31st March, 1911, was 2,753 miles, of which 1,150 were situated in the North Island and 1,603 in the South Island.

The sections of the North Island lines consist of the Kawakawa, 8 miles; Whangarei, 27; Kaihu, 17; Gisborne-Waikohu, 23 miles; and the North Island main line and branches, 1,075 miles. The South Island sections comprise the South Island main line and branches, 1,349 miles; Westland, 141; Westport, 31; Nelson, 48; Picton, 34 miles. The estimated total cost of construction to 31st March, 1911, was £29,606,546 (besides £1,903,414 spent on unopened lines), and the average cost per mile of open line £10,754.

The following statement shows the number of miles of Government railways open, the number of train-miles travelled and of

passengers carried, and the tonnage of goods traffic, for the past twenty years:—

Year.	Length open.	Train-mileage.	Passengers.	Season Tickets issued.	Goods and Live-stock.*
					Tons.
1891-92 ..	1,869	3,010,489	3,555,764	16,341	2,122,987
1892-93 ..	1,886	3,002,174	3,759,044	16,504	2,258,235
1893-94 ..	1,948	3,113,231	3,972,701	17,226	2,128,709
1894-95 ..	1,993	3,221,620	3,905,578	28,623	2,123,343
1895-96 ..	2,014	3,307,226	4,162,426	36,233	2,175,943
1896-97 ..	2,018	3,409,218	4,439,387	43,069	2,461,127
1897-98 ..	2,055	3,666,483	4,672,264	48,660	2,628,746
1898-99 ..	2,090	3,968,708	4,955,553	55,027	2,744,441
1899-1900 ..	2,104	4,187,893	5,468,284	63,335	3,251,716
1900-1901 ..	2,212	4,620,971	6,243,593	82,921	3,461,331
1901-1902 ..	2,235	5,066,360	7,356,136	100,778	3,667,039
1902-1903 ..	2,291	5,443,333	7,575,390	118,431	3,918,261
1903-1904 ..	2,328	5,685,399	8,306,383	129,919	4,259,217
1904-1905 ..	2,374	6,107,079	8,514,112	140,453	4,185,468
1905-1906 ..	2,407	6,413,573	8,826,382	147,989	4,415,166
1906-1907 ..	2,458	6,755,454	9,600,786	165,504	4,824,563
1907-1908 ..	2,474	7,051,274	9,756,716	185,174	5,070,176
1908-1909 ..	2,682	7,458,236	10,457,144	192,547	5,135,408
1909-1910 ..	2,717	7,889,166	11,141,142	199,371	5,490,018
1910-1911 ..	2,753	8,141,075	11,200,613	222,104	5,863,674

* The equivalent tonnage for live-stock has been given.
miles open for traffic during the year was 2,742.

† The average number of

The traffic in local products for the past twenty years was:—

Year.	Wool.	Timber.	Grain.	Minerals.	Horses and Cattle.	Sheep and Pigs.
	Tons.	Tons.	Tons.	Tons.	Number.	Number.
1891-92 ..	85,888	170,521	442,277	873,899	47,618	1,117,253
1892-93 ..	96,842	169,910	523,637	884,031	46,590	1,359,860
1893-94 ..	101,340	183,192	411,191	864,538	51,573	1,394,456
1894-95 ..	103,328	198,578	388,556	857,917	52,075	1,563,213
1895-96 ..	99,363	213,132	374,699	878,659	50,766	1,893,058
1896-97 ..	98,958	257,825	423,888	1,032,252	47,256	2,016,437
1897-98 ..	103,055	313,073	427,448	1,048,868	54,871	2,399,379
1898-99 ..	97,396	310,266	420,071	1,147,353	66,226	2,552,745
1899-1900 ..	104,621	334,677	764,033	1,218,698	76,537	2,559,836
1900-1901 ..	96,519	380,803	772,571	1,366,241	84,289	2,463,250
1901-1902 ..	101,878	427,153	813,345	1,443,792	95,384	2,780,019
1902-1903 ..	116,309	436,008	718,376	1,604,426	115,198	3,883,177
1903-1904 ..	101,316	509,712	820,453	1,744,323	122,064	3,826,646
1904-1905 ..	107,625	493,327	732,480	1,806,360	126,575	3,490,752
1905-1906 ..	116,086	534,533	772,258	1,938,548	136,319	3,441,387
1906-1907 ..	128,161	567,835	770,706	2,135,446	150,801	4,776,223
1907-1908 ..	120,593	616,892	739,568	2,319,913	169,174	4,719,087
1908-1909 ..	137,916	582,860	793,793	2,342,048	179,008	5,329,115
1909-1910 ..	151,051	523,845	1,044,468	2,486,121	196,983	5,253,692
1910-1911 ..	143,247	627,107	1,013,298	2,655,250	230,985	6,071,670

The revenue for the year 1910-11 amounted to £3,494,182; and the total expenditure to £2,303,272. The net revenue—£1,190,910—was equal to a rate of £4·06 per cent. on the capital cost; the percentage of expenditure to revenue was 65·92. The earnings on some of the lines ranged as high as £11 19s. 10d. per cent.

The particulars of the revenue and expenditure for the past twenty years are given:—

Year.	Pas- senger- fares.	Parcels, Lug- gage, and Mails.	Goods and Live- stock.	Rents and Miscel- laneous	Total.	Expendi- ture.	Net Revenue	Percentages of Expenditure to Revenue.	Percentages of Revenue to Capital Cost.*
	£	£	£	£	£	£	£	%	£ s. d.
1891-92	364,617	41,795	671,469	37,550	1,115,431	706,517	408,914	63·34	2 15 9
1892-93	390,619	44,601	707,785	38,316	1,181,521	732,141	449,380	61·97	3 1
1893-94	402,019	45,206	686,469	39,098	1,172,792	735,358	437,434	62·70	2 17 9
1894-95	385,149	43,270	683,726	38,706	1,150,851	732,160	418,691	63·62	2 14 6
1895-96	389,234	54,736	698,115	40,956	1,183,041	751,368	431,673	63·51	2 16 0
1896-97	410,160	58,054	774,163	43,751	1,286,158	789,054	497,104	61·35	3 3 10
1897-98	433,430	60,872	837,589	44,117	1,376,008	857,191	518,817	62·30	3 4 10
1898-99	475,553	66,418	882,077	45,617	1,469,665	929,737	539,928	63·26	3 5 10
1899-00	515,020	68,488	985,723	54,660	1,623,891	1,052,358	571,533	64·80	3 8 5
1900-01	544,976	72,712	1,051,694	57,854	1,727,236	1,127,847	599,389	65·30	3 9 8
1901-02	621,019	79,561	1,110,575	63,431	1,874,586	1,252,237	622,349	66·80	3 8 6
1902-03	625,098	87,273	1,189,101	71,966	1,974,038	1,343,415	630,623	68·05	3 6 1
1903-04	704,660	110,151	1,298,169	72,661	2,180,641	1,438,724	741,917	65·98	3 11 8
1904-05	738,158	115,051	1,277,976	78,046	2,209,231	1,492,900	716,331	67·58	3 6 0
1905-06	786,873	142,642	1,346,038	74,151	2,349,704	1,621,230	728,465	69·00	3 4 9
1906-07	832,053	151,913	1,498,686	81,948	2,624,600	1,812,482	812,118	69·06	3 9 1
1907-08	912,978	176,876	1,582,328	89,756	2,761,938	1,949,759	812,179	70·59	3 6 8
1908-09	1,011,658	187,040	1,630,704	100,124	2,929,526	2,114,815	814,711	72·19	3 2 7
1909-10	1,171,040	192,585	1,772,547	113,618	3,249,790	2,169,474	1,080,316	66·76	3 16 0
1910-11	1,223,412	193,789	1,961,078	115,903	3,494,182	2,303,272	1,190,910	65·92	4 1 3

NOTE.—For 1895-96 and subsequent years the railways have been credited with the value of services performed for other Government departments, and debited with the value of work done for the railways by other departments.

* The rate of interest earned has been computed on cost proportionately to the time during which the lines taken over by the Working Railway's Department within the financial year were earning revenue.

The revenue per (average) mile of railway open during the year was £1,275, and the expenditure £840; equal to 8s. 6 $\frac{3}{4}$ d. and 5s. 7 $\frac{3}{4}$ d. per train-mile respectively.

The total number of miles travelled by trains was 8,141,075.

In addition to the above railways, there were 29 miles of private lines open for traffic on the 31st March, 1911.

AUSTRALASIAN RAILWAYS.

Government railways open for traffic in Australasia:—

Railways (State only).

Country.	Year ended	Average Miles open.	Train-miles run.	Cost of Construction and Equipment of Open Lines.	Gross Receipts.	Working expenses.	Percentage of Net Revenue to Cost.	Number of		
								Locomotives.	Passenger.	Vehicles. Goods and Live-stock Trucks and Vans.
Queensland	30 June, 1910	3,533	8,157,427	£ 24,336,372	£ 2,338,468	£ 1,414,271	% 3.80	465	531	9,239
New South Wales	30 June, 1910	3,625	15,468,026	48,925,348	5,435,715	3,276,409	4.58	872	1,023	15,952
Victoria	30 June, 1910	3,441	11,705,612	43,142,329	4,443,863	2,711,545	4.02	523	1,308	12,026
South Australia	30 June, 1910	2,038	5,450,608	15,532,757	1,852,653	1,081,582	4.96	354	477	6,890
Western Australia	30 June, 1910	2,102	4,398,138	11,377,262	1,637,334	1,096,908	4.75	318	367	7,113
Tasmania	30 June, 1910	*469	1,059,790	4,048,416	284,063	211,677	1.78	79	179	1,671
New Zealand	31 Mar., 1911	2,742	8,141,075	29,606,546	3,494,182	2,303,272	4.06	478	1,166	18,036

* Includes 7½ miles private lines worked by Government.

In addition to the Government lines open for traffic in 1910, New South Wales had 266 miles of private railway; Victoria, 51 miles; South Australia, 58 miles; Western Australia, 842 miles (partly used for timber conveyance); Queensland, 544 miles; Tasmania, 204 miles, 7½ miles of which are worked by Government; and New Zealand, on 31st March, 1911, 29 miles.

POSTAL AND ELECTRIC TELEGRAPH.

There were 2,257 post-offices in New Zealand at the end of 1910.

The number of letters and letter-cards, post-cards, books, and pattern-packets, newspapers, and parcels posted and delivered during the year, compared with the number posted and delivered in 1909, was as under:—

	Total posted and delivered.		Increase or Decrease.
	1910.	1909.	
Letters and letter-cards ..	196,768,968	186,926,337	9,842,631*
Post-cards	13,631,668	14,188,642	506,974†
Books and pattern-packets	55,008,362	50,047,928	4,960,434*
Newspapers	42,305,554	42,561,641	256,087†
Parcels	2,471,964	2,161,634	310,330*

* Increase.

† Decrease.

The average number of letters, &c., posted per head of the population in each of the past seven years was,—

	1904.	1905.	1906.	1907.	1908.	1909.	1910.
Letters and letter-cards ..	73.40	76.09	82.13	86.46	91.37	95.98	97.14
Post-cards	2.43	3.38	5.71	6.63	6.58	6.32	5.83
Books and parcels	21.62	24.90	23.97	23.82	26.46	26.29	30.04
Newspapers	18.23	19.87	19.04	19.56	20.14	20.48	18.51

The facilities afforded for the transmission of parcels through the Post Office to places within and without the Dominion have proved of much convenience to the public. The regulations admit of parcels up to 11 lb. in weight being sent to almost all the important countries of the world.

The following table shows the number of parcels exchanged with the United Kingdom, the Australian States, &c., in 1910 and 1909:—

Country.	Number of Parcels.			
	Received.		Despatched.	
	1910.	1909.	1910.	1909.
United Kingdom and foreign countries <i>via</i> London	83,312	77,481	12,252	12,293
United States	6,164	5,681	1,022	1,154
Vancouver	601	595	351	335
Victoria	8,241	8,298	3,153	3,375
New South Wales	13,365	12,499	4,963	5,008
South Australia	518	525	409	491
Queensland	765	720	752	785
Tasmania	469	551	720	782
Western Australia	377	378	412	507
Samoa	18	10	148	165
Fiji	145	146	511	519
Ceylon	535	432	86	89
Uruguay	..	..	118	96
Cape Colony	452	425	157	167
Natal	96	94	197	245
India	1,049	1,021	222	280
Tonga	7	10	167	151
Hong Kong	107	..	39	..
Totals	116,221	108,866	25,679	26,442

The declared value of the parcels received from places outside the Dominion was £307,299, on which the Customs duty amounted to £60,177 10s. 2d.

The number and weight of parcels *dealt with from 1901 to 1910 are given below :—

—	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
Parcels	273,442	291,670	327,629	357,504	392,017	448,171	801,937	970,153	1,148,471	1,306,982
No.										
Weight	928,237	1,034,342	1,161,584	1,279,707	1,386,723	1,638,231	2,863,909	3,367,116	3,903,227	4,533,770
lb.										

* "Dealt with" means the total posted plus the foreign received.

Money-orders and Postal Notes.

The number of offices open for the transaction of money-order business at the end of 1910 was 664.

During 1910, 569,657 money-orders, for a total sum of £2,457,522 18s. 5d., were issued at the various post-offices. The money-orders from places beyond New Zealand and payable in the Dominion numbered 36,126, for the amount of £145,698 1s. 5d.

The number of offices open for the sale of postal notes at the end of 1910 was 815: 1,598,468 postal notes were sold, value £511,875 8s. 6½d. Commission amounted to £7,330 12s. 0½d.

The notes paid numbered 1,585,150, value £500,881 8s.

Mail Services.

Estimated cost on account of the Peninsular and Oriental and Orient Mail Service for the year 1910 :—

	£	s.	d.
Payment to P. and O. and Orient Lines ..	10,784	8	4
Transit charges across Australia and Europe ..	6,139	5	0
Mail-services to Australia	15,288	10	3
	£32,212	3	7

The average number of days in 1910 within which the mails were delivered between London and each of the undermentioned ports in New Zealand was :—

London to—	P. and O. Line.	Orient Line.
Auckland	37	37
Wellington	38	38
Christchurch	39	39
Dunedin	38	38

Electric Telegraph.

The first Government telegraph-lines in New Zealand were constructed by the provincial authorities.

The Canterbury Provincial Government opened a line between Christchurch and Lyttelton in the beginning of the year 1863. On the 12th February, 1864, the Southland Provincial Government

opened a line between Invercargill and the Bluff. The General Government subsequently acquired both the above-named lines, and further established communication by wire between Dunedin and Invercargill, also Dunedin and Christchurch, on the 25th May, 1865.

Messrs. Driver and McLean, merchants, of Dunedin, erected a private line between Dunedin and Port Chalmers, which was opened to the public in 1861, and acquired by the General Government some time after the opening of through communication between Lyttelton, Christchurch, Dunedin, and Bluff, referred to above.

There were 11,316 miles of telegraph-line open at the end of March, 1911, carrying 37,212 miles of wire. 8,360,647 telegrams were transmitted during the year; of these, the private and Press messages numbered 8,268,340, which, together with telephone exchange and other telegraph receipts, yielded a revenue of £434,115 19s. 8½d.

There were thirty central telephone exchanges and one hundred and forty-four sub-exchanges on the 31st March, 1911. The number of connections increased from 29,681 in March, 1910, to 33,228 in March, 1911. The subscriptions to these exchanges during the financial year amounted to £161,173 6s. 10d.

The capital expended on the equipment, &c., of the several telephone exchanges up to the 31st March, 1911, was £783,382 15s. 4d.

Pacific Cable.

The cable, opened for traffic between New Zealand and Australia and Fiji on the 9th April, 1902, was completed to Bamfield, Vancouver Island, on the 31st October following, and opened for international business on the 8th December, 1902.

The route is from Doubtless Bay, New Zealand, to Vancouver, Canada, *via* Norfolk Island, Fiji, and Fanning Island. The Australian connection is at Norfolk Island. The deep-sea portion of the Vancouver-Fanning Island cable is stated to be the longest in the world. Following the opening of the cable a much faster service between New Zealand, America, and Europe has resulted.

SECTION XI. THE MILITARY FORCES OF THE DOMINION OF NEW ZEALAND.

THE New Zealand Defence Forces consist of the following :-

Permanent Forces.

- (a.) The New Zealand Staff Corps (officers).
- (b.) The Permanent Staff (warrant and non-commissioned officers).
- (c.) The Royal New Zealand Artillery (Field and Garrison).

Territorial Forces.

- (1.) The regiments of Mounted Rifles (twelve).
- (2.) The New Zealand Field Artillery (eight batteries).
- (3.) The New Zealand Garrison Artillery (nine companies).
- (4.) The New Zealand Engineers (four companies).
- (5.) The Infantry Regiments (sixteen).
- (6.) The New Zealand Signal Corps (eight companies).
- (7.) The New Zealand Army Service Corps.
- (8.) The New Zealand Medical Corps (eight field ambulances).
- (9.) The New Zealand Veterinary Corps.
- (10.) The Rifle Clubs.
- (11.) The Senior Cadets.

ORGANIZATION.

Officers and soldiers of the New Zealand Staff Corps, Permanent Staff, and R.N.Z.A. are at all times liable for foreign service; the remainder of the Military Forces are liable for service within the Dominion only. The Senior Cadets, as such, are not liable for active service.

The organization and establishment of the New Zealand Staff Corps, Permanent Force, and the Senior Cadets, and the organization for peace and war of the Territorial Force, including the establishments of units, are laid down in Appendix I ("New Zealand Establishments").

For the purpose of decentralization the Dominion is divided into four military districts—viz., the Auckland District, the Canterbury District, the Otago District, the Wellington District. The military districts are further divided into "area-groups" and "areas."

STAFF.

The Staff of the New Zealand Military Forces consists of—The Staff at Headquarters; the Staff in districts. The Staff is divided into—(1) the General Staff, (2) the Administrative Staff.

The Commandant in his capacity of General Officer Commanding and Inspector-General of the Forces is responsible for the organization, discipline, and efficiency of the Forces. In his capacity as Chief of the Dominion Section of the Imperial General Staff he is responsible for advice on local military policy to be pursued, organization of the local Forces in accordance with State policy, plans for local defence, supervision of training of troops, education of officers, and selection of officers of local Forces for study at Imperial Staff Colleges.

LIABILITY FOR SERVICE UNDER THE DEFENCE ACTS.

The liability of all male inhabitants of the Dominion for service in the Military Forces is laid down in the Defence Act and Regulations as under:—

The Act provides for the gradual military training of every male New-Zealander from the age of twelve to the age of twenty-five, after which he will serve in the Reserve up to the age of thirty. There are no distinctions and no exceptions. Every one, unless physically unfit, will have to take his share in the defence of the Dominion. Those who, in consequence of the doctrines of their religion, have a conscientious objection to bearing arms in the service of their country will be trained as far as possible in the non-combatant branches, of which ambulance work will be made a special feature.

NATURE OF SERVICE.

From the age of twelve to the age of fourteen the boy will be a Junior Cadet, and will perform a certain amount of elementary military training, chiefly physical, under the direction of the Education Department.

On reaching the age of fourteen, or on leaving a primary school, the boy will be transferred to the Senior Cadets, and will then become a member of the Military Forces, though not liable to be called out to fight.

He will remain a Senior Cadet till he is eighteen. On reaching the age of eighteen, he will, if found, on again being medically examined, to be physically fit, be drafted into the Territorial Force. As a Territorial soldier he will be liable to be called out at any time for service within the Dominion.

On reaching the age of twenty-five he will be transferred to the Reserve, in which he will remain till he reaches the age of thirty, when he will be discharged. As a Reservist he will be liable to be called back to his regiment in case of war or other national emergency.

If he belongs to a Rifle Club he will, as long as he remains a member, be liable up to the age of fifty-five to be called up as part of a secondary Reserve to fill the ranks of the Territorial Force after its own Reserve has been used up.

Every youth who has attained the age of fourteen on 1st March last, but has not attained the age of twenty-one on that date, is

called upon by law to register. On registration for service, those who have a preference to serve in any particular arm or branch of the service, combatant or non-combatant, are invited to say so. Those wishing to join the Mounted Rifles must provide their own horses and saddlery.

The number of Territorials and Senior Cadets registered up to 5th August, 1911, for military training and not yet posted to units, together with those already serving, are shown in the following table according to military districts:—

District.	Territorials now serving (under twenty-one years).	Registered for Enrolment.	Senior Cadets (in- cluding those serving).	Totals.	Those over age in Territorial Force desirous of con- tinuing Service (approximately).
	1.	2.	3.	4.	5.
Auckland ..	1,643	5,906	6,963	14,512	720
Canterbury ..	1,536	5,015	7,195	13,746	950
Otago ..	1,669	4,395	6,227	12,291	696
Wellington ..	1,461	6,700	9,779	17,940	496
Totals ..	6,309	22,016	30,164	58,489	2,862

The total of columns 1, 2, and 5 = 31,187, which is about the strength required by new Army Establishments. The total number of the Territorial Force available for service in each district, which will be distributed according to the requirements of establishments and the exigencies of the service generally, are—Auckland, 8,269; Canterbury, 7,501; Otago, 6,760; Wellington, 8,657.

THE TRAINING.

The training of the Cadet and soldier throughout his service will be strictly territorial—that is to say, it will, except for the one week a year spent by the Territorial soldier in camp, be carried out within reach of his home, and at convenient times.

The whole of the training will be arranged with every possible consideration for the interests both of the employer and of those who are being trained.

The minimum amount of training which must be performed each year by every member of the Territorial Force, Reserve, Senior Cadets, and Rifle Clubs is as follows:—

Territorial Force.

- (a.) Thirty drills, twenty of which will be out-of-door parades.
- (b.) Twelve half-day or six whole-day parades, all of which will be exercises in the fields, except in the case of Garrison Artillery units, which will be exercised at the works of defence to which they are allotted on mobilization.

- (c.) Seven days annual training in camp (exclusive of the days of arrival and departure).
- (d.) Prescribed course of musketry.

Reserve.

Two half-day parades or their equivalent with a Territorial unit or company.

Senior Cadets.

- (a.) Fifty drills.
- (b.) Six half-day parades.
- (c.) Prescribed course of musketry.

Rifle Clubs.

Prescribed course of musketry.

A drill in the Territorial Force is one hour and a half continuous instruction. A drill in the Senior Cadets is one hour continuous instruction. A half-day parade is three hours continuous instruction. A whole-day parade is six hours continuous instruction.

An out-of-door parade may be carried out in the evening, and will not be devoted entirely to drill, but will include route marching, outposts by day and by night, entrenching, signalling, driving, &c., and such work as cannot conveniently be carried out indoors. In the case of Artillery and Technical Corps the proportion of outdoor parades may be reduced at the discretion of the Commanding Officer. The principle is that the drill-shed should be avoided as far as possible.

THE TERRITORIAL FORCE.

The New Zealand Territorial Force is the first line of defence of the Dominion after the Imperial Navy. Its position cannot be fairly compared with that of the Territorial Force in the United Kingdom, which has the Regular Army and Special Reserve in front of it. The New Zealand Territorial Force must be able to take the field at once on the outbreak of war. It is the New Zealand Army; and the permanent officers of the Staff Corps, the Permanent Regiment of the Royal New Zealand Artillery, and the warrant and non-commissioned officers of the Permanent Staff are its auxiliaries to control, guide, and instruct it.

The Territorial Force will be about thirty thousand strong, and is organized in field and coast-defence units with practically the same establishment for peace as for war. In each of the four military districts into which the Dominion is divided there is a brigade of Infantry, a brigade of Mounted Rifles, and a brigade of Field Artillery, as well as the necessary number of Garrison Artillery for coast-defence (three companies each in Wellington and Auck-

land, and one company each at Dunedin, Lyttelton, and Westport), a field company of Engineers, and Medical units, and other departmental troops. An Infantry brigade includes four battalions and a Signal company; a Mounted Brigade, three regiments of Mounted Rifles and a Signal Company; and a brigade of Artillery, two four-gun batteries.

The Force will be fully armed and equipped according to the most modern standard; the men will be uniformed by the State, and will be paid and rationed during the annual camp.

The units of the Force will be commanded and trained by their own officers, assisted by the Staff Corps, the Permanent Force, and the Permanent Staff. Each Regimental Commander has a certain number of professional soldiers to help him and to relieve him of administrative duties, but no one to interfere between him and his regiment. The officers will be drawn from the ranks on the recommendation of Commanding Officers, and will be appointed and promoted, and retired, in accordance with definite regulations calculated to insure their efficiency and their status.

THE SENIOR CADETS.

The unit of organization and training in the Senior Cadets is the company of Infantry. Companies composed of Cadets belonging to any school or other recognized organization (such as the Boy Scouts) will form part of that school or organization, and be subject to its discipline, supplemented by the Regulations. In dealing with such companies and in the appointment of their officers, the Military authorities will co-operate with headmasters and with the heads of such other recognized organizations. The Senior Cadets will be officered by officers holding Territorial commissions on the Unattached List, with the same qualifications and liabilities as other Territorial officers.

In order to simplify the control of Cadets, it has been decided by the Ministers of Education and Defence that for training purposes (not registration—all over fourteen must register) all pupils attending primary schools will be considered Junior Cadets, and all pupils attending secondary schools will be considered Senior Cadets, irrespective of their ages.

THE RESERVE.

Men of the Territorial Force Reserve will be borne on the reserve lists of their late unit of corps, and perform their annual parades with some part of that unit or corps.

THE RIFLE CLUBS.

The Rifle Clubs, being part of the New Zealand Military Forces in virtue of the liability of their members to serve as a secondary Reserve, will be governed by the Military Regulations, and will carry out each year a prescribed course of musketry.

MILITARY CADETS.

Under arrangement with the Commonwealth Government, provision has been made for the nomination of ten New Zealand Cadets annually for a course of training at the Royal Australian Military College, in order to prepare them to fill positions in the New Zealand Staff Corps. The course will be of four years' duration, and the expense is to be borne by the New Zealand Government.

INTERCHANGE OF OFFICERS.

Arrangements have been made between the Army Council and the Government of New Zealand for the selection (on interchange) of officers required to fill vacancies in the Headquarters Staff, and in the General and Administrative Staffs of the several military districts. In this connection it may be added that four New Zealand officers have entered for the qualifying examination for entrance to the Staff College held recently at Headquarters.

SECTION XII.—LAW AND CRIME.

CIVIL CASES.

THE number of actions commenced, cases tried, judgments entered, and the amount for which judgments were recorded in the Supreme and District Courts during the ten years 1901–10 was as follows:—

SUPREME AND DISTRICT COURTS : CIVIL JURISDICTION.

Year.	Number of Actions commenced.	Cases tried.		Judgments recorded.	
		With Jury.	Without Jury.	Number.	Amount.
					£
1901	567	40	102	170	46,900
1902	579	60	139	184	24,845
1903	595	49	187	138	32,146
1904	634	63	185	149	48,771
1905	654	62	221	155	50,031
1906	599	73	240	189	44,955
1907	703	57	197	177	47,872
1908	849	70	243	225	73,687
1909	870	67	222	267	91,638
1910	569	52	211	193	83,427

It would appear that the greater number of cases are settled out of Court, the actions tried representing an average of only 38 per cent. of those commenced.

The ordinary civil jurisdiction of Magistrates' Courts is limited generally to claims not exceeding £100, but extended jurisdiction is exercised by some Magistrates, the limit being £200. Justices of the Peace may hear and decide civil cases when the sum in dispute does not exceed £20. The number of plaints issued, cases tried, amount sued for, and amount for which judgment was recorded in those Courts during the ten years 1901–10 is shown in the following table:—

Year.	Plaints entered.	Cases tried.	Amounts sued for	Amounts for which Judgment entered.
			£	£
1901	30,302	19,136	315,528	175,604
1902	28,140	17,027	320,719	159,133
1903	28,744	16,571	285,793	157,766
1904	34,230	19,569	335,147	179,829
1905	37,157	20,161	379,941	202,923
1906	40,540	23,381	419,198	236,643
1907	42,561	24,435	429,379	232,306
1908	42,877	27,578	529,271	282,932
1909	52,456	29,782	597,831	326,040
1910	55,225	29,698	562,115	293,326

These figures show a marked increase in both the number of litigants and the amount sued for. It would appear that the practice of using the Courts as *media* for the collection of small debts is growing. In 1909 the civil cases brought before County Courts and Courts of Petty Sessions in Victoria numbered 37,559, the total amount sued for being £342,279. The limit of jurisdiction is £500 in the former and £50 in the latter Courts.

COURT OF APPEAL.

The Court of Appeal is composed of any two or more Judges of the Supreme Court, with the Chief Justice or, in his absence, the senior Judge presiding. The decision of the Court must be in accordance with the opinion of a majority of the Judges present. Certain proceedings may by order of the Supreme Court be removed to the Court of Appeal. The decision of the Court of Appeal is final as regards the tribunals of New Zealand, but the Court may, in civil proceedings, give leave to either party to appeal to the Privy Council. In criminal cases any party aggrieved by the judgment of the Supreme Court or any conviction or order removed into such Court, or on appeal against any such order, may appeal to the Court of Appeal. The number of cases brought before this Court and the judgments thereon for the past five years will be seen in the following table:—

Crown Criminal Cases.				Civil.			
Year.	Number.	Convictions affirmed.	Appeals.		Cases removed.		
			Number.	Allowed.	Number.	Judgments for Plaintiffs.	Judgments for Defendants.
1906	4	2	26	10	6	5	1
1907	6	6	16	7	7	5	2
1908	9	5	15	6	13	8	4
1909	7	4	16	7	15	9	6
1910	8	8	17	10	11	6	5

One civil case removed to the Court in 1908 was not proceeded with.

BANKRUPTCY.

Under the Bankruptcy Act, 1908—a consolidation of the then existing laws—a person may seek the protection of the Bankruptcy Court by filing a petition with a declaration of insolvency, or one or more creditors may petition the Court to have a debtor declared insolvent. The Dominion is divided into four districts for administrative purposes, each district being in charge of a Government officer styled the Official Assignee, who is assisted by deputies

stationed at the principal business centres. The number of adjudications on petitions by debtors and creditors and the number of discharges from bankruptcy granted during the past five years was as follows:—

Year.	Adjudications on		Discharge from Bankruptcy granted.
	Petitions by Debtors.	Petitions by Creditors.	
1906	305	42	103
1907	302	48	107
1908	354	52	105
1909	412	59	122
1910	329	64	135

Private assignments and compositions are not registered, and particulars respecting this class of insolvency are not procurable.

The following table shows the total number of petitions, the amount of the unsecured assets, the amount of debts proved, and the amount paid in dividends and preferential claims for the years 1901-10:—

Year.	Number of Petitions in Bank- ruptcy.	Debtors' Statements of Assets, excluding Amounts secured to Creditors.	Amounts realized by Official Assignees.	Amount of Debts proved.	Amounts paid in Dividends and Prefer- ential Claims.
		£	£	£	£
1901 ..	222	58,658	49,781	84,452	30,358
1902 ..	205	61,604	39,386	110,995	29,406
1903 ..	204	46,767	23,761	88,019	17,618
1904 ..	257	86,094	43,514	125,392	28,103
1905 ..	304	100,813	47,798	146,332	28,150
1906 ..	347	106,376	50,761	192,927	35,448
1907 ..	350	77,698	59,849	158,663	42,459
1908 ..	406	200,447	67,018	199,069	47,800
1909 ..	471	204,187	71,351	259,017	44,110
1910 ..	393	127,634	79,100	176,001	47,796

Of the bankruptcies in 1910: in 12 cases the liabilities were under £50; in 63, from £50 to £100; in 134, from £100 to £250; in 83, from £250 to £500; in 56, from £500 to £1,000; in 25, from £1,000 to £2,000; in 9, from £2,000 to £5,000; in 5, £5,000 and upwards. In twelve cases no statements were filed.

DIVORCE.

In 1898 the Legislature of New Zealand passed a Divorce Act, and the signification of Her late Majesty's assent thereto was duly notified by His Excellency the Governor in a Proclamation dated

the 1st April, 1899, bringing the Act into operation from the 1st June of that year.

This Act placed persons of either sex practically on an equality as regards petitions for dissolution of marriage; the same grounds, in substance, for a decree of divorce applying to man or woman.

Besides this important alteration of the law, the grounds for divorce are extended as under :—

1. Adultery, on either side.
2. Wilful desertion continuously during five years or more.
3. Habitual drunkenness during four years and upwards on the part of husband, along with failing to support wife, or habitual cruelty; or habitual drunkenness for a like period and neglect, with unfitness to discharge her household duties on the part of the wife.
4. Conviction, with sentence of imprisonment or penal servitude for seven years or upwards, for attempting to take life of petitioner.

Every decree for dissolution of marriage is in the first instance to be a decree *nisi*, not to be made absolute till after the expiration of such time, being not less than three months from the pronouncing thereof, as the Court shall by order from time to time direct.

The petitioner need not necessarily move to make absolute any decree *nisi* that may be pronounced

An amendment to the Act of 1904 was passed by the Legislature in 1907, and after having been reserved for the assent of His Majesty the King became law on the 9th May, 1908.

By this Act failure to comply with a decree for restitution of conjugal rights ceases to be a ground for divorce proceedings. On the other hand the following grounds have been added, viz. :—

“That the respondent has been convicted of the murder of a child of the petitioner or respondent.

“That the respondent is a lunatic or person of unsound mind, and has been confined as such in any asylum or other institution or house in accordance with the provisions of the Lunatics Act for a period or periods not less in the aggregate than ten years within twelve years immediately preceding the filing of the petition, and that the respondent is unlikely to recover from such lunacy or unsoundness of mind.”

It is provided that where the ground of the petition is lunacy or unsoundness of mind, the Solicitor-General shall take such steps as he may consider necessary in the interests of the respondent.

A decree for a judicial separation may be obtained either by the husband or wife on the ground of adultery, or of cruelty, or of desertion without cause for a period of two years.

All enactments of the General Assembly of New Zealand relating to divorce, judicial separation, restitution of conjugal rights, and summary separation, prior to 1908, were consolidated in that year,

and re-enacted under the title of the Divorce and Matrimonial Causes Act, 1908.

The petitions for divorce in 1910 under the Divorce and Matrimonial Causes Act, were 200 in number, being 19 less than those for 1909: 154 decrees for dissolution of marriage were granted. The proceedings under the Act for the years 1901-10 were as follows:—

Year.	Divorces.		Judicial Separation granted.	Nullity of Marriage.	
	Petitions for.	Decrees.		Petitions for.	Decrees.
1901	136	101	1	1	1
1902	129	90	..	3	1
1903	134	124	3	3	4
1904	134	99	2	4	2
1905	163	114	..	2	1
1906	171	125	1	6	6
1907	192	147	1	3	2
1908	207	171	3	2	1
1909	219	163	..	3	2
1910	200	154	7	7	6

In previous issues of the Year-book, owing to a defect in the returns, the number shown of petitions and decrees for dissolution of marriage included petitions and decrees for nullity of marriage and restitution of conjugal rights. The foregoing table excludes these causes which, during the period under review, were as follows:—

Year.	Petitions for		Decrees for	
	Nullity of Marriage.	Restitution of Conjugal Rights.	Nullity of Marriage.	Restitution of Conjugal Rights.
1901	1	1	1	1
1902	3	4	1	..
1903	3	9	4	8
1904	4	18	2	9
1905	2	17	1	11
1906	6	30	6	20
1907	3	30	2	21
1908	2	11	1	9
1909	3	2	2	1
1910	7	..	2	..

In the year 1897 there was one application for restitution of conjugal rights, but it is only since 1901 that this means of establishing a ground for divorce has been resorted to with frequency. As before stated, disobedience of an order for restitution is no longer a ground of petition for dissolution of marriage.

The Act of 1898 has evidently operated in the direction of increasing largely the number of petitions and decrees for dissolution of marriage or judicial separation.

The proportion of petitions and decrees for dissolution of marriage to the number of marriages was up till 1898 higher in New Zealand than in England and Wales, but lower than in New South Wales or Victoria. The full effect of the operation of the new law in New Zealand is now, however, being experienced.

As early as 1889 an Act was passed in Victoria to allow of divorces being granted for wilful desertion, habitual drunkenness with cruelty or neglect, imprisonment under certain circumstances of either party, and adultery on the part of the husband. This multiplication of the causes for divorce has largely increased the proportion of decrees in that State.

An Act of a similar tenor was passed in New South Wales in 1892, and brought into working in August of that year, under which, and an amending Act of 1893, in addition to adultery since marriage on the part of the wife, and adultery and cruelty on the part of the husband, petitions for divorce can now be granted in that State on any of the following grounds:—

Husband *v.* wife: Desertion for not less than three years; habitual drunkenness for a similar period; refusing to obey an order for restitution of conjugal rights; being imprisoned under a sentence of three years or upwards; attempt to murder or inflict grievous bodily harm, or repeated assaults on him within one year previously.

Wife *v.* husband: Adultery, provided that at the time of the institution of the suit the husband is domiciled in New South Wales; desertion for not less than three years; habitual drunkenness with cruelty or neglect to support for the same period; refusing to obey an order for restitution of conjugal rights; being imprisoned for three years or upwards, or having within five years undergone various sentences amounting in all to not less than three years; attempt to murder, or assault with intent to inflict grievous bodily harm, or repeated assaults within one year previously.

To entitle either party to seek relief on these grounds, he or she must have been domiciled in the State at the time of instituting the suit for three years or upwards, and should not have resorted to the State for the purpose of the suit. When a wife seeks for a decree on the ground of three years' desertion, if she was domiciled in New South Wales when the desertion commenced, she shall not be deemed to have lost her domicile by reason of her husband having thereafter acquired a foreign domicile.

The divorces in New South Wales and Victoria since the divorce law has been altered in the direction of increasing the grounds for decrees are as under. With these are given the figures for New Zealand under the old law up to 1898, and according to the Act of

1898 up to 1909. The figures for New South Wales tend to show that on altering the law there was a large accumulation of cases to get rid of, which increased the number of decrees to a degree which was not subsequently maintained.

Year.	New South Wales. Divorces.		Victoria. Divorces.		New Zealand. Divorces	
1893	..	306	..	85	..	25
1894	..	313	..	81	..	20
1895	..	301	..	85	..	18
1896	..	234	..	106	..	36
1897	..	246	..	117	..	33
1898	..	247	..	87	..	31
1899*	..	232	..	105	..	46
1900*	..	219	..	93	..	85
1901*	..	252	..	83	..	101
1902*	..	245	..	109	..	90
1903*	..	206	..	101	..	124
1904*	..	216	..	140	..	99
1905*	..	176	..	136	..	114
1906*	..	175	..	123	..	125
1907*	..	223	..	134	..	147
1908*	..	195	..	151	..	171
1909*	..	275	..	138	..	163

* Act of 1898 in force in New Zealand.

CRIMINAL CASES.

Charges before Magistrates.

The number of charges heard before the Magistrates' Courts in 1910 was 38,736. Repeated charges against the same person are counted each as a distinct person. Of these charges, 529 were against persons of the aboriginal Native race, a decrease of 41 on the number for the previous year.

If the Maoris be excluded, the number of charges (exclusive of lunacy) in 1910 is found to have been 38,207, an increase of 1,305 upon the number for 1909; and the proportion per 1,000 of population was 38·48 and 37·97 in each year respectively.

Persons charged with lunacy and committed to mental hospitals have been excluded from the calculations for this and previous years shown, so that the figures now given will differ somewhat from those appearing in former issues of this book.

The figures, both numerical and proportional, covering a period of twenty-six years are subjoined:—

CHARGES BEFORE MAGISTRATES.

Year.	Number.	Proportion per 1,000 of Mean Population.	Year.	Number.	Proportion per 1,000 of Mean Population.
1885	22,297	38·89	1903	30,753	37·50
1888	18,370	30·35	1904	30,934	36·60
1891	16,714	26·54	1905	30,741	35·33
1894	16,820	24·76	1906	32,866	36·70
1897	19,390	26·87	1907	36,852	40·09
1899	22,113	29·48	1908	36,286	38·40
1900	24,084	31·54	1909	36,902	37·97
1901	25,825	33·20	1910	38,207	38·48
1902	28,076	35·19			

Summary Convictions.

The summary convictions in 1910 numbered 32,435, including 455 Maoris. 1,135 persons, 28 of whom were Maoris, were committed for trial or sentence at the Supreme and District Courts, an increase of 19 on the number committed in 1909.

Dealing with the summary convictions for all offences, the figures for 1906 and onward (excluding the Maoris) are:—

Year.	SUMMARY CONVICTIONS.		
	Number.	Proportion per 1,000 of Mean Population.	
1906—			
Offences against the person	640	0.71	
Offences against property	2,050	2.29	
Other offences	24,438	27.29	
Totals	27,128	30.29	
1907—			
Offences against the person	752	0.82	
Offences against property	2,174	2.37	
Other offences	27,530	29.95	
Totals	30,456	33.14	
1908—			
Offences against the person	733	0.78	
Offences against property	2,525	2.67	
Other offences	27,042	28.61	
Totals	30,300	32.06	
1909—			
Offences against the person	772	0.79	
Offences against property	2,223	2.29	
Other offences	27,702	28.51	
Totals	30,697	31.59	
1910—			
Offences against the person	655	0.66	
Offences against property	2,078	2.09	
Other offences	29,247	29.46	
Totals	31,980	32.21	

In dealing with the summary convictions in the Magistrates' Courts each offence is reckoned as a distinct person. The total number is from time to time swelled by the inclusion of breaches of statutes, the provisions of which give rise to fresh offences against the public welfare not strictly criminal, so that comparisons with past years are adversely affected.

The total of summary convictions for offences against the person (excluding Maoris) was 655 for the year 1910, which is a less number than that for 1909 (772). Of these 655 summary convictions in 1910, the greater number (597) were on account of common and aggravated assaults, and there were 55 for attempt to commit suicide.

Of offences against property, theft not otherwise described is the most common, showing for 1910 1,372 summary convictions. There were besides 17 for specific kinds of theft, and 13 for house-breaking. Obtaining money and goods under false pretences caused 188 summary convictions, and wilful damage to property 446. These are the principal items only.

Under the heading "Other Offences" (those relating to good order included), drunkenness comes first with 11,613 summary convictions, of which 805 were in respect of females. Prohibition orders numbered 2,490, including 153 made against women. The subject of drunkenness is specially dealt with under a separate heading.

Further offences against good order include 4,351 summary convictions simply defined as "breach of by-laws," and 1,986 for insulting behaviour, language, &c., and indecent, riotous, or offensive conduct. Also, 247 for assaulting or resisting police. Under "Vagrancy," idle and disorderly persons show 558 summary convictions, rogues and vagabonds 263. The chief items only are referred to above.

Convictions in Superior Courts.

Of 70 persons (excluding the Maoris) convicted in the superior Courts during the year 1910 for offences against the person there was 1 female. Assault, with or without robbery, caused 18 convictions, including wounding with intent. There were also 27 convictions for indecent assault, 6 for rape and carnal knowledge of young girls, 2 for attempt to commit rape, and 11 for other offences. For murder and manslaughter and attempts, 6 persons were convicted.

The convictions for offences against property were far more numerous than those against the person, amounting to 138, of whom 4 were females. Theft was the principal cause, showing 58 convictions, exclusive of burglary with robbery, for which 41 convictions were recorded.

Besides the above, there were 12 convictions for forgery and uttering, 14 for obtaining goods on false pretences and for receiving stolen goods, 10 for arson, and 3 others.

Outside of convictions for offences against person and property, 27 of a miscellaneous nature remain, making up a total of 235 convictions in the higher Courts, excluding 243 persons, other than Maoris, sent for sentence by Magistrates.

During the five years 1906-10 the number of persons convicted and sentenced in the Supreme and District Courts, and those who, on pleading guilty in the lower Courts, were committed to the Supreme Court for sentence was as follows:—

SUPERIOR COURTS—CONVICTIONS, &C., 1906-10.

Year.	Offences against the Person.	Offences against Property.	Other Offences.	Total Convictions.	Number committed for Sentence included in previous Columns.
1906 ..	104	270	33	407	167
1907 ..	104	312	34	450	148
1908 ..	121	338	42	501	232
1909 ..	117	352	45	514	256
1910 ..	89	355	34	478	243

Where a Magistrate, after the preliminary hearing of an information, proposes to commit any accused person for trial for an indictable offence not punishable by death, the accused may plead guilty and be then sent to the Supreme Court for sentence without further trial. The offences committed by the 243 persons who elected to be so dealt with during the year 1910 were of the following nature: Offences against the person numbered 19, including assault, 7; bigamy, 1; and indecent assault, 5. Of 217 charges for offences against property the most numerous were: For theft, 86; breaking and entering and theft, 60; forgery and uttering, 42; false pretences, 12.

Punishments.

Including 16 Maoris, the convictions in the superior Courts, together with 243 sent from Magistrates' Courts for sentence, numbered 494 (persons). Particulars of sentences for these higher Courts, and of the punishments consequent on summary convictions in the lower Courts, are appended in two tables:—

TABLE SHOWING THE SENTENCES OF CRIMINALS TRIED AND CONVICTED IN THE SUPREME AND DISTRICT COURTS DURING FIVE YEARS.

Punishments.	1906.	1907.	1908.	1909.	1910.
Death	1	1	..	1	..
Imprisonment with or without hard labour ..	350	369	399	454	362
Fined	7	11	16	10	10
Imprisonment with whipping	1	2	2	1	1
Released on probation	56	65	76	45	83
Held to bail, or awaiting pleasure of Court ..	16	32	37	32	35
Sent to industrial school	2	1	2	1	3
Totals	*433	†481	‡532	§544	||494

* Including 26 Maoris.

† Including 31 Maoris.

‡ Including 31 Maoris.

§ Including

30 Maoris. || Including 16 Maoris.

TABLE SHOWING THE PUNISHMENTS INFLICTED CONSEQUENT ON SUMMARY CONVICTIONS IN MAGISTRATES' COURTS DURING FIVE YEARS.

Punishments.	1906.	1907.	1908.	1909.	1910.
Fine	13,517	17,884	16,639	16,996	17,516
Imprisonment in lieu of fine ..	3,476	1,714	2,285	2,102	2,672
Peremptory imprisonment ..	2,089	2,173	2,043	2,220	2,250
Recognizance	100	73	96	135	77
Whipping	56	44	53	90	37
Other	7,890	8,568	9,179	9,154	9,428
Totals	27,128	30,456	30,300	30,697	31,980

N.B.—Maoris have been excluded from this table.

HABITUAL CRIMINALS AND OFFENDERS

In 1906 provision was made by law for the detention and control of habitual criminals and offenders. Habitual criminals comprise those persons previously convicted on indictment of the following offences: (Class I) sexual offences, abortion; (Class II) wounding, robbery, burglary and housebreaking, theft, false pretences, extortion, forgery, and mischief. On two previous convictions for any offence in Class I or four previous convictions in Classes I and II, the Court may order as part of the sentence that the person is an habitual criminal, whether such previous convictions took place within or out of New Zealand, and either before or after the coming into operation of the Act. Habitual offenders comprise all persons previously convicted on at least six occasions as idle and disorderly persons, rogues and vagabonds, or incorrigible rogues, and persons previously convicted as above under Classes I and II and convicted summarily of any offence punishable by not less than three months' imprisonment, provided such persons have been previously summarily convicted at least six times of any offence punishable by not less than three months' imprisonment.

Any prison or other suitable place may be set apart as a reformatory prison for the detention of habitual criminals and offenders, a separate part being set aside for women. Every habitual criminal or offender shall be detained during the pleasure of the Governor, but may apply to the Supreme Court or a Judge thereof for a recommendation of discharge on the ground of having sufficiently reformed, or for other good and sufficient reason. The Governor upon granting such discharge may order that so long as the person remains in New Zealand he shall report his name and address to some Probation Officer, for a period not exceeding two years, at stated times, either personally or by letter. Should such person fail to report himself as directed, he shall be liable to a penalty not exceeding twenty pounds or imprisonment for a term not exceeding three months. If during the period of probation he is convicted of failure to report himself, or of any indictable offence

punishable on summary conviction by three months' imprisonment, the Court may direct that in addition to the punishment imposed for the offence he shall be recommitted to a reformatory prison, but if during the period of probation he be not so convicted he shall cease to be an habitual criminal or offender.

Any person detained in a reformatory prison shall be employed in some description of labour, and wages according to the scale prescribed by regulations shall be credited to him and applied either wholly or in part to maintaining his wife and family, if any, during the period of his detention, and the balance, if any, paid to him upon his release.

Provision is made for the maintenance and management of reformatory prisons and the control of those detained therein.

A wing of the New Plymouth Prison has been selected as a reformatory, sufficient accommodation being thus provided for the anticipated necessities of the next few years. The following is the number of prisoners committed to the reformatory during each year since the inception of the system :—

Year.			Males.	Females.	Total.
1907	..	..	1	..	1
1908	..	..	3	1	4
1909	..	..	16	3	19
1910	..	..	21	1	22

DRUNKENNESS.

The Licensing Act, 1908, is a consolidation of the laws regulating the sale of intoxicating liquor previously in force. For administrative purposes the Dominion is divided into districts, for each of which a committee, elected by the popular vote, is charged with the duty of granting or refusing the issue of licenses for the sale of drink, and the inspection through the police of licensed houses. The sale of drink is prohibited absolutely on Sundays, and also upon the day of a parliamentary election between the hours of noon and 7 p.m. Application for renewal of licenses must be made annually, and the committee may refuse such renewal on the grounds of misconduct of the licensee or that the premises occupied are unfit for the purpose. For certain breaches of the law a license may be cancelled or a licensee may be disqualified from again holding a license in the Dominion.

The number of convictions for breaches of the licensing laws by publicans and for selling liquor without a license during the past five years was as follows :—

Year.	Convictions for	
	Breaches of Licensing Laws by Publicans.	Selling Liquor without a License.
1906	114	120
1907	207	58
1908	158	98
1909	179	156
1910	177	135

The charges against publicans include selling liquor after hours or on Sundays, failing to admit the police promptly, allowing drunkenness on premises, supplying prohibited or intoxicated persons, failing to keep light burning in front of premises, &c.

The number of convictions for drunkenness and drunkenness with disorderly conduct recorded during 1910 was 10,808 against males, and 805 against females. There is no information available as to the exact number of distinct persons dealt with, but it is estimated to be about 8,000. The following table shows the number of convictions for drunkenness recorded and the proportion per 1,000 of the population of each sex, excluding Maoris, during the past ten years:—

CONVICTIONS FOR DRUNKENNESS, 1901-10.

Year.	Convictions recorded against.			Per 1,000 of Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
1901 ..	7,031	1,001	8,032	17·19	2·71	10·32
1902 ..	7,331	913	8,244	17·45	2·42	10·34
1903 ..	7,937	845	8,782	18·32	2·18	10·70
1904 ..	8,648	927	9,575	19·34	2·33	11·32
1905 ..	7,875	850	8,725	17·09	2·08	10·03
1906 ..	8,561	859	9,420	18·04	2·04	10·52
1907 ..	9,374	812	10,186	19·24	1·88	11·08
1908 ..	9,892	717	10,609	19·73	1·62	11·23
1909 ..	9,942	755	10,697	19·28	1·68	11·01
1910 ..	10,808	805	11,613	20·58	1·72	11·70

Among the New-Zealand-born population of European descent there is evidence of less drunkenness than among persons who have come from abroad. At the census of 1906, out of the total population of New Zealand over 15 years of age, 55·75 per cent. were found to have been born here; while the proportion of the convictions for drunkenness of New-Zealand-born Europeans to the total convictions was in the year 1910 about 24 per cent. only.

Repeated charges against the same person are included in the totals shown above, and it is estimated that the number of distinct persons brought before the Court for this offence was not more than 70 per cent. of the total charges. About forty-three per cent. of the persons charged in 1910 had convictions previously recorded against them for drunkenness in either that or previous years.

Any person who has been three times convicted for drunkenness within the nine months immediately preceding any conviction for drunkenness may be declared an habitual drunkard. A Magistrate may, in addition to or in lieu of a penalty, commit an habitual drunkard to any institution authorized by the Governor to receive and detain such persons for any period not being less than twelve months. The law provides for the discharge of

inmates, their good conduct, discipline, and punishment for offences during their detention, and for the proper inspection of such institutions.

A calculation of the amount of alcoholic liquor consumed per head of the total population is generally used to illustrate the increase or decrease of consumption. It is with this intention that the table of average consumption is given below.

CONSUMPTION OF BEER, WINE, AND SPIRITS PER HEAD OF POPULATION
(INCLUDING AND EXCLUDING MAORIS).

	Including Maoris.			Excluding Maoris.		
	Beer. Gal.	Wine. Gal.	Spirits. Gal.	Beer. Gal.	Wine. Gal.	Spirits. Gal.
1906	9·085	0·136	0·734	9·569	0·143	0·773
1907	9·649	0·151	0·766	10·150	0·159	0·806
1908	9·689	0·150	0·757	10·179	0·158	0·795
1909	9·256	0·136	0·705	9·710	0·143	0·740
1910	9·294	0·147	0·737	9·741	0·154	0·773

It would appear that during the period covered by the table the consumption of alcohol has increased, the comparative falling off for the last two years being no doubt due to weakness in purchasing power brought about by depression of trade. The quantity of each kind of alcoholic liquor used in the Dominion during the past five years was as follows :—

		Beer for Consumption. Gals.	Wine for Consumption. Gals.	Spirits for Consumption. Gals.
1906	..	8,570,460	128,120	692,324
1907	..	9,328,710	146,179	740,936
1908	..	9,619,380	149,115	751,602
1909	..	9,436,240	138,704	719,137
1910	..	9,671,030	153,430	767,620

According to the Commonwealth Statistician the average consumption per head of alcoholic liquors in Australia during 1909 was,—

		Spirits. Gal. Per Head.	Wine Gal. Per Head.	Beer. Gal. Per Head.
New South Wales..	..	0·81	0·5	10·07
Victoria	..	0·62		11·74
Queensland	..	0·92		11·32
South Australia ..	..	0·57		8·26
Western Australia	..	1·09		17·79
Tasmania	..	0·51		8·52

The average annual consumption in the United Kingdom for the period 1903-7 was—spirits, 0·85 gallon per head; beer, 26·7 gallons per head; and wine, one-fourth of a gallon per head.

CRIME AMONGST MAORIS.

The average number of convictions of Maoris brought before Magistrates' Courts since 1895 is shown in the following table.

SUMMARY CONVICTIONS OF MAORIS.

Period.	Average Number.	Period.	Average Number.
1891-1895	296	1907	445
1896-1900	337	1908	552
1901-1905	372	1909	454
1906	542	1910	455

These numbers apply only to the Maoris residing in the main Islands of the Dominion. As the Maori population is considered to be practically stationary in number, it would appear that, as far as minor offences are concerned, criminality is on the increase.

The number of convictions in the higher Courts exhibits the extent of serious crime amongst the Native race. Persons who pleaded guilty in the lower Court and were remanded to the Supreme Court for sentence have been included.

Maoris convicted or sentenced in
Supreme Court for

Year.	Offences against the Person.	Offences against Property.	Miscellaneous Offences.	Total.
1906	5	20	1	26
1907	5	26	..	31
1908	6	20	5	31
1909	6	21	3	30
1910	4	10	2	16

Of the Maoris convicted or sentenced in 1910, 4 were charged with offences against females, 9 with housebreaking and theft, and 1 with false pretences. One female is included in the number.

POLICE.

The strength of the Police Force in New Zealand on the 31st December, 1910, was 795, consisting of 9 inspectors, 7 sub-inspectors, 4 station sergeants, 82 sergeants, 643 constables, 37 detectives, and 13 acting-detectives. There were also 19 district constables, 8 Native constables, 4 matrons, and 4 surgeons. The proportion of police to population is 1 to every 1,321 persons.

The following table shows the number of stations and number of police in each Police District:—

Police District.	Stations.	No. of Police.
Auckland	63	173
Thames	21	35
Napier	25	45
Wanganui	37	78
Wellington	40	146
Greymouth	23	42
Christchurch	43	131
Dunedin	39	108
Invercargill	21	37

The expenditure (exclusive of the cost of buildings) on the whole Police Force for the year ended the 31st March, 1911, was 3s. 4½d. per head of population.

PRISONERS IN GAOL.

The total number of prisoners received in the different gaols during the year 1910 was 5,444 (males 4,922, females 522) as compared with 5,289 (males 4,746, females 543) in 1909, counting each admission as a distinct person. This number includes 585 men and 64 women awaiting trial, 267 men and 12 women acquitted or discharged after trial, 4,070 men and 446 women under sentence, but excludes 115 debtors and lunatics.

The number of persons in gaol (including Maoris) at the end of each of the past ten years and the proportion per 10,000 of population is given in the next table:—

PRISONERS IN GAOL (31ST DECEMBER).

Year.	Number of Prisoners			Proportion per 10,000 of Population.	
	Undergoing Sentence.	On Remand and awaiting Trial.	Total.	Undergoing Sentence.	Total in Confinement.
1901	661	52	713	8.39	9.05
1902	602	51	653	7.45	8.08
1903	688	51	739	8.26	8.88
1904	701	49	750	8.17	8.75
1905	760	50	810	8.61	9.18
1906	833	58	891	9.17	9.80
1907	791	56	847	8.54	9.14
1908	815	64	879	8.48	9.15
1909	950		950	..	9.22
1910	882		882	..	8.48

Of the prisoners previously convicted received in 1910, 683 men and 34 women had been convicted once; 414 men and 43 women twice; 1,705 men and 331 women three or more times: making a total of 2,802 men and 408 women.

Besides the returns from the Prisons Department, a separate card for each admission is furnished for every gaol. Such cards as show convictions are arranged alphabetically according to name of prisoner, and where several are found referring to the same person, all are thrown out but one; then the number of cards retained equals the actual number of distinct convicted prisoners received in the various gaols during the year. In 1910 this number (excluding Maoris) was 3,242, an increase of 84 on the number in 1909. These figures do not include children committed to the industrial schools simply on the ground that they are neglected or destitute.

In classifying the offences a prisoner convicted of more than one offence during the year is reckoned once only, under the heading of the principal offence—*e.g.*, a prisoner convicted three times of drunkenness, twice of vagrancy, and once of theft is counted only once, under the heading "Offences against Property." Debtors and

lunatics received into gaol are omitted. The figures under the heading "Drunkenness" do not represent the full number of persons punished for that offence, the punishment usually being by fine.

The following tables show the number of distinct persons (exclusive of Maoris) received into gaol after conviction during 1910, classified according to nature of offence, age, and birthplace:—

AGES OF DISTINCT CONVICTED PRISONERS RECEIVED INTO GAOL DURING 1910.

Ages.	Nature of Offence.				Total.
	Against the Person.	Against Property.	Drunkenness.	Other Offences.	
Under 15 years		2	..	..	2
15 and under 20 years ..	11	60	8	19	98
20 " 25 " ..	28	166	52	110	356
25 " 30 " ..	57	170	142	166	535
30 " 40 " ..	69	221	344	338	972
40 " 50 " ..	38	95	271	211	610
50 " 60 " ..	24	39	210	133	406
60 years and over ..	16	19	141	87	263
Totals	238	772	1,168	1,064	3,242

BIRTHPLACES OF DISTINCT CONVICTED PRISONERS RECEIVED INTO GAOL DURING 1910.

Birthplace.	Nature of Offence.				Total.
	Against the Person.	Against Property.	Drunkenness.	Other Offences.	
England and Wales ..	58	173	341	267	839
Scotland	24	37	176	83	320
Ireland	12	47	195	135	389
New Zealand	113	370	275	406	1,164
Australian States ..	17	88	87	86	278
Other British possessions	2	11	15	16	44
China	..	3	..	12	15
Other countries ..	12	43	79	59	193
Total	238	772	1,168	1,064	3,242

The number of distinct persons (exclusive of Maoris) imprisoned after conviction, in the past twenty years, counting one offence only when the same person was imprisoned more than once, with the proportion per 10,000 persons living, is added:—

DISTINCT PERSONS IMPRISONED AFTER CONVICTION.

Year.	Prisoners.	Proportion per 10,000 of Population.	Year.	Prisoners.	Proportion per 10,000 of Population.
1891 ..	2,113	33·55	1901 ..	2,345	30·14
1892 ..	2,164	33·69	1902 ..	2,396	30·03
1893 ..	2,111	31·92	1903 ..	2,842	34·65
1894 ..	1,955	28·78	1904 ..	2,896	34·27
1895 ..	1,930	27·87	1905 ..	2,796	32·14
1896 ..	1,936	27·11	1906 ..	2,966	33·12
1897 ..	1,884	25·84	1907 ..	3,091	33·63
1898 ..	1,982	26·92	1908 ..	3,009	31·84
1899 ..	2,125	28·33	1909 ..	3,159	32·51
1900 ..	2,116	27·71	1910 ..	3,242	32·66

It must be understood that the actual number of imprisonments was much in excess of the figures given, as many persons were several times imprisoned, either for offences differing in kind or for repetitions of the same offence. Thus, persons returned as imprisoned for larceny underwent other imprisonments for drunkenness, &c. Some returned as convicted of drunkenness were several times in gaol during the year for the same offence, or for another, such as assault, riotous or indecent conduct, &c. Often there were several charges preferred against the same person at the one time, of which the most serious followed by conviction has been selected.

EXPENDITURE ON GAOLS AND PRISONERS.

The gross expenditure on the gaols (exclusive of the cost of buildings) for the year ended the 31st December, 1910, was £45,447.

CRIME AMONGST NEW-ZEALAND-BORN.

While the New-Zealand-born formed at the last census 68 per cent. of the whole population, excluding Maoris, they contributed in 1910 only 36 per cent. of the prisoners received in gaol. Of the New-Zealand-born population, however, a large number are under fifteen years of age, a period of life at which there are very few prisoners; and therefore another comparison is necessary. It is found that the New-Zealand-born over fifteen years formed 56 per cent. of the total population above that age; but, as before stated, New-Zealanders constituted only 36 per cent. of the total number received in gaols.

The number of New-Zealand-born distinct prisoners (excluding Maoris) received for the year 1910—1,164 persons—is found to be 68 more than the number for 1909. Of the number received in 1910, 80 were under twenty years of age. As before stated, the plan adopted in preparing the foregoing tables is to count each prisoner only once, and to exclude all who are not convicted prisoners, besides dealing only with the number received during the year, instead of with the full number in gaol, which would, of course, include those brought forward from the previous year. The comparative results for a series of years given by this method are held to be more valuable than those brought out by one which includes prisoners merely awaiting trial, and continual repetitions of the same individuals.

TREE-PLANTING BY PRISONERS.

There are now three tree-planting prison-camps established—viz., Waiotapu and Waipa Valley in the North Island, and Hammer Springs in the South Island. There were 77 prisoners at these camps at the end of 1910, and a considerable amount of planting, clearing, fencing, and other work was carried out during the year.

FIRST OFFENDERS' PROBATION ACT.

One hundred and eight persons were placed on probation in the year 1910, as against 80 in 1909. Of these, 24 were discharged after satisfactorily carrying out the conditions of their licenses, 24 were rearrested, 9 absconded, 3 were permitted to leave the Dominion, and 68 remained under the supervision of Probation Officers.

Of the 2,301 persons placed on probation since October, 1886, no less than 1,980 had by the end of the year 1910 been discharged after satisfactorily carrying out the conditions of their licenses, 141 had been rearrested and sentenced to various terms of imprisonment, 1 committed suicide, 5 died, 57 absconded, 5 were permitted to leave the Dominion, and 112 remained fulfilling the conditions of their terms of probation.

The amount of costs which the various Courts directed to be paid during the year 1910 was £465 17s. 1d., of which £260 3s. 3d. has been actually paid.

INQUESTS.

It is the duty of a Coroner or Deputy Coroner, or, in their absence, a Justice of the Peace, to inquire into the manner of death of any person who is killed or drowned, or dies suddenly, or in prison, or while detained in a mental hospital, and an inquest must be held on the body of every person executed to certify that the sentence was duly carried out.

The jurisdiction of a Coroner extends throughout the Dominion, but he is not compelled to hold any inquest at a greater distance

than twenty miles from his residence; but the duties of a Deputy Coroner or Justice of the Peace are in each case strictly limited to the above radius. A Coroner may, if he thinks fit, take an inquest either by himself or by a jury of not less than four nor more than six, unless specially directed by the Attorney-General to summon a jury. A *post-mortem* examination of a body may be ordered by a Coroner, and, if considered advisable, an analysis. Jurors need not view the body, but the Coroner is exempt from this duty only when it is certified by a medical man that the deceased died of an infectious disease.

Any person interested may, by permission of the Coroner, attend an inquest personally or by counsel, and may examine and cross-examine witnesses. When a verdict of murder or manslaughter is returned against a particular person the Coroner may issue a warrant to apprehend and take the accused before a Justice. It shall also be the duty of the Coroner, in case of such a verdict, whether charging any person or not, to send a copy of the verdict and all depositions to the Attorney-General, who may take such steps as he deems desirable.

Jurors are entitled to payment at the rate of 8s. per day of more than four hours, or 4s. for less than four hours. Witnesses are allowed 6s. for each day and 4s. for each night of absence from home.

The number of bodies on which inquests were held in 1910 was 1,279, including 44 Maoris. In 989 cases the bodies were of males, and in 290 of females.

The inquests on suicidal deaths in 1910 show an increase on the number for the previous years. The figures for each of the last ten years were:—

Year.	Inquests on Suicides.			Year.	Inquests on Suicides.		
	Males.	Females.	Total.		Males.	Females.	Total.
1901 ..	71	13	84	1906 ..	85	15	100
1902 ..	69	5	74	1907 ..	94	7	101
1903 ..	91	15	106	1908 ..	87	15	102
1904 ..	89	16	105	1909 ..	94	22	116
1905 ..	73	23	96	1910 ..	90	16	106

The verdicts given at the inquests held in 1910 may be classified as under:—

Nature of Verdict.	Inquests on Persons.		
	Males.	Females.	Total.
Accident	439	68	507
Disease and natural causes ..	456	204	660
Homicide	4	2	6
Suicide	90	16	106
	989	290	1,279

Of the accidental deaths, drowning is the most fatal form. The verdicts show that 156 bodies were found drowned, giving a percentage of 30·77 on the accidental deaths from all causes.

FIRE INQUESTS.

In case of fire, causing the destruction of any building, ship, or merchandise, or any stack of grain, pulse, or hay, or any growing crop, a Coroner may hold an inquiry into the cause of such fire, the procedure being similar to that of inquests into cause of death.

The inquests on fires held during 1910 numbered 21. In 9 cases the verdict was incendiarism; in 2 cases accidental; in 1 there was insufficient evidence; and in 9 no evidence was forthcoming.

GAMING AND LOTTERIES.

The Gaming Act is designed to suppress gambling by confining all betting to totalizators on racecourses. It contains provisions for the closing of "tote" shops and for the declaration by the Supreme Court of "common gaming-houses" on the affidavit of a Superintendent or Inspector of Police showing reasonable grounds for suspecting that any premises are used as a common gaming-house or as a means of access thereto or exit therefrom. Notice of such declaration is advertised and gazetted, served on the owner or occupier, and posted up on the premises.

There are also provisions for determining any such declaration on proof that the premises are not used as a common gaming-house or in conjunction therewith. The Act provides penalties for carrying on business in, the continued use of, and being found on the premises during the currency of the declaration, and includes a club, in certain cases, in the term "common gaming-house."

Constables have power of entry over the premises, and may use such force as may be necessary. To obstruct or give warning of the approach of a constable in the performance of his duty is an offence. Any game of chance is made an unlawful game, and the definition of "occupier" is extended. The Gaming Act is made to apply to lotteries whether promoted in New Zealand or elsewhere.

Street betting is punishable by a fine of not less than £20 or more than £100 for the first offence, and by imprisonment not exceeding three months for a second or any subsequent offence. The terms "betting" and "bet" in the Act of 1910 include the act of any person in betting, wagering, offering, or agreeing to bet or wager, paying, receiving, or settling any bet or wager, whether on his own behalf or on behalf of any other person.

A constable on duty, or person acting under instructions from any Superintendent or Inspector of Police, is not deemed an offender or accomplice in the commission of any offence against the Gaming Act.

Racing clubs must not accept any totalizator investment by telegram or telephone. The publication is prohibited of dividends (except on the racecourse), and racing tips and the "double" totalizator is abolished. The totalizator must be closed not later than the time advertised for the starting of a race. Persons under the age of twenty-one are not allowed to invest on the totalizator, and any member, officer,

agent, or servant of a racing club who knowingly receives or registers, or otherwise takes into account or permits or authorizes to be received or registered, any investment shall be guilty of an offence, and shall be liable to a fine not exceeding £100, and any person who falsely represents himself as being of the age of twenty-one years and upwards is liable to a fine not exceeding £50. No investment on the totalizator shall be received otherwise than in money, bank-notes, or cheque before or at the time of investment.

The number of charges laid in the Magistrates' Courts for breaches of the gaming laws, and how such charges were disposed of, is shown for five years in the following table :—

Year.			Number of Charges.	Cases dismissed.	Committed for Trial.	Convictions recorded.
1906	..	..	190	54	10	126
1907	..	..	240	54	5	181
1908	..	..	305	70	1	234
1909	..	..	275	47	..	228
1910	..	..	332	69	..	263

THE TOTALIZATOR.

A LICENSE may be issued on the recommendation of the senior magistrate of the district in which a racing club is established, permitting the club to use the totalizator, or wagering-machine, at a horse-racing meeting held under the control or management of such club. These licenses are revocable at any time. Licenses to use the totalizator after the 31st July, 1911, shall be issued in respect of a single race meeting, and shall specify the number of days on which the totalizator may be used at that meeting. The aggregate number of days on which the totalizator is so authorized to be used throughout the Dominion in any year after the 31st July, 1911, shall not exceed 250; the number of days on which

the totalizator is so authorized to be used at any one race meeting shall not exceed four. The number of machines that may be used at a meeting is limited to three.

Year.	No. of Totalizator Licenses issued for Meetings held during Financial Year.	Days.	Percentage paid to Treasury.	Total Amount Invested by the Public.
			£	£
1889-90	187	241	..	..
1890-91	219	278	..	..
1891-92	234	300	7,591	506,078
1892-93	240	307	10,800	720,029
1893-94	247	318	10,375	691,673
1894-95	207	268	10,446	696,456
1895-96	170	256	11,156	743,763
1896-97	158	250	11,911	794,096
1897-98	155	268	13,297	886,567
1898-99	144	250	13,695	912,969
1899-1900	154	278	15,983	1,065,580
1900-1	153	278	17,541	1,168,732
1901-2	165	309	19,040	1,275,813
1902-3	148	276	19,734	1,274,102
1903-4	151	282	20,486	1,357,263
1904-5	156	294	21,571	1,437,431
1905-6	158	298	22,898	1,555,638
1906-7	159	303	27,651	1,837,095
1907-8	152	292	29,996	1,999,757
1908-9	157	307	27,964	1,834,333
1909-10	167	323	29,645	2,030,426
1910-11	144	287	48,338	1,933,534

The years used for purposes of the table are financial years, not the racing years. This accounts for the number of licenses issued in some of the periods being over the legal limit for one year.

On the 1st March, 1910, the Government tax on totalizator investments was increased from $1\frac{1}{2}$ per cent. to $2\frac{1}{2}$ per cent. of the gross amount passed through the machines.

SECTION XIII.—VITAL STATISTICS.

REGISTRATION OF BIRTHS, DEATHS, AND MARRIAGES.

NEW Zealand is (1st June, 1911) divided into 223 marriage districts, with a Registrar for each district. These Registrars of Marriages are also Registrars of Births and Deaths for the registration districts. There are, in addition, eight districts constituted under the Births and Deaths Registration Act only, each having a Registrar with power to register births and deaths, but not to solemnize marriage.

The birth of every child born alive in New Zealand must be notified to the Registrar of the district wherein it occurred within seventy-two hours if in a city or borough, or within twenty-one days in any other case. Such notice must be given by the occupier of the house in which the birth took place, and set forth the date of birth and the name and address of the father or mother. There is a penalty up to £5 for non-compliance.

In addition to the liability above stated, the occupier is responsible jointly with the mother, father, and each person present at birth, for the registration of the birth.

The provisions generally as to registration are that a birth may be registered within sixty-two days (inclusive of the day of birth) without fee. After sixty-two days and within six months a birth is registrable only after solemn declaration made before the Registrar by the parent or some person present at birth, and on payment of a late fee of 5s. When six months have elapsed a birth cannot be registered except within a month after conviction of one of the responsible parties for neglect. But an information for such neglect must be laid within two years of date of birth. The foregoing provisions do not apply to still births.

Every death occurring in New Zealand should be registered before burial, but *must* be registered within thirty-one days. There is a penalty up to £10 for neglect, the undertaker in charge of the funeral being primarily looked to for registration. The other parties responsible are the occupier of the house in which the death took place, and every person present at the death. The law does not impose any limit of time after which a death may not be registered as it does in the case of a birth.

Births and deaths may be registered by agents specially authorized in writing on forms supplied by all Postmasters and Registrars for the purpose, so that personal attendance of the responsible parties at the Registrar's office is not necessary, except when a declaration has to be made before the Registrar.

Although births and deaths should be registered with the Registrar of the district in which they occur, nevertheless registration is permitted at the office of the Registrar most convenient to the party registering.

Marriage may be solemnized in New Zealand only on the authority of a Registrar's certificate, either by a person whose name is

on the list of officiating ministers under the Marriage Act, or before a Registrar or Deputy Registrar of Marriages duly appointed.

Notice of intended marriage must be given to the Registrar of the district within which the marriage is to be solemnized, and the party giving notice must have resided for three clear days in the district. If the parties dwell in different districts, notice must be given to and a certificate obtained from the Registrar of each district. In the case of a person under twenty-one not being a widow or widower, the consent of parent or guardian is necessary before the Registrar's certificate can be issued.

The fees payable are—Notice, 2s. 6d.; certificate authorizing marriage, £1; marriage before the Registrar, £1.

BIRTHS.

The number of births registered during 1910 was 25,984, or 26·17 in every 1,000 persons living. The number is 540 below that for the year 1909, a decrease of 2·04 per cent., and the rate lower by 1·12 per thousand. From 1882 until the year 1899 there was a regular fall in the rate. The births registered in a year numbered 19,846 in 1884, and, after falling to 17,876 in 1892, have risen to the number first stated above.

The number of male children born during 1910 was 13,442, and of female children 12,542.

The following table shows the number registered, the birth-rate calculated on the total population, and comparison with the average rate for 1882–86 taken as 100. Indications of a gradual increase are apparent, the improvement since 1899 being 4·18 per cent. on the rate per 1,000 in that year.

BIRTHS, NUMBER AND RATE.

Year.	Total Number of Births Re- gistered.	Birth-rate.		Year.	Total Number of Births Re- gistered.	Birth-rate.	
		Per 1,000 of Popula- tion.	Compared with Rate in 1882-86 taken as 100.			Per 1,000 of Popula- tion.	Compared with Rate in 1882-86 taken as 100
1882-86	19,410	35·40	100	1898	18,955	25·74	73
1887	19,135	32·09	91	1899	18,835	25·12	71
1888	18,902	31·22	88	1900	19,546	25·60	72
1889	18,457	30·07	85	1901	20,491	26·34	74
1890	18,278	29·44	83	1902	20,655	25·89	73
1891	18,273	29·01	82	1903	21,829	26·61	75
1892	17,876	27·83	79	1904	22,766	26·94	76
1893	18,187	27·50	78	1905	23,632	27·22	77
1894	18,528	27·28	77	1906	24,252	27·08	76
1895	18,546	26·78	76	1907	25,094	27·30	77
1896	18,612	26·33	74	1908	25,940	27·45	77
1897	18,737	25·96	73	1909	26,524	27·29	77
				1910	25,984	26·17	74

GRAPHS SHOWING THE RATES OF BIRTHS, DEATHS,
AND MARRIAGES IN NEW ZEALAND, 1855-1910.



EXPLANATION OF THE GRAPHS.—The base of each small rectangle represents a year's interval, and the vertical height one per thousand of the population.

A declining birth-rate is noticeable in many civilized countries, and attention has been drawn by statisticians and political economists to the serious consequences that may result. That fertility among women in New Zealand has decreased, from whatever causes, further facts will tend to show.

Taking the number of married women in New Zealand at what may be considered the child-bearing ages (*i.e.*, from 15 to 45 years, inclusive) as shown by each census since 1878, and for the same years the number of legitimate births (excluding plural) registered, the birth-rate per 1,000 married women of the above-stated ages is easily found, and is shown to be steadily declining. In 1878 the rate was 337 per 1,000, in 1896 it had fallen to 252, in 1901 to 244, and in 1906 to 228; or, in other words, in 1878 one married woman of the ages specified in every three gave birth to a child, while in 1906 the rate was less than one in four. The figures for each census year are given below.

BIRTH-RATES (LEGITIMATE) PER 1,000 MARRIED WOMEN AT CHILD-BEARING AGES FOR EACH CENSUS YEAR, 1878 TO 1906.

Year (Census).		Number of Married Women between 15 and 45 Years of Age.	Proportion per Cent. of Married Women in the Female Popula- tion aged 15 to 45 Years.	Number of Legitimate Births (Confinements).	Birth-rate per 1,000 Married Women of from 15 to 45 Years of Age.
1878	..	50,995	63·50	17,196	337·2
1881	..	57,458	59·76	18,003	313·3
1886	..	62,704	53·19	18,532	295·5
1891	..	63,165	48·12	17,455	276·3
1896	..	69,807	44·12	17,596	252·1
1901	..	79,406	43·30	19,355	243·8
1906	..	98,211	46·15	22,352	227·6

Another table is given, showing for a period of twenty-five years the numbers of married women at quinquennial groups of age belonging to the full term 15 to 45 years, with the proportions that those numbers bear to every 100 married women living at 15-45. These proportions are found to have diminished appreciably at the earlier ages, 15-20 and 20-25; but the effect of this lesser number of wives at the earlier ages in reducing the birth-rate would not be serious. It is, however, undoubtedly a fact that to have a growing proportion of wives at the earlier productive ages is the best position, but it is not the one which obtains at present in New Zealand.

MARRIED WOMEN UNDER 45 YEARS OF AGE, GIVEN ACCORDING TO AGE-GROUPS, AS AT THE CENSUSES OF 1881, 1891, 1901, AND 1906; WITH THE PROPORTION IN EACH GROUP FOR EVERY 100 OF THE WHOLE.

Age-groups.	Married Women under 45, excluding Chinese.							
	Numbers at Census.				Proportions per Cent.			
	1881.	1891.	1901.	1906.	1881.	1891.	1901.	1906.
15-20 ..	1,233	750	777	928	2.14	1.19	0.98	0.95
20-25 ..	8,996	8,862	10,053	12,153	15.66	14.03	12.66	12.37
25-30 ..	13,133	14,540	17,923	24,030	22.86	23.02	22.57	24.47
30-35 ..	12,656	14,576	19,617	23,025	22.03	23.08	24.70	23.44
35-40 ..	11,811	12,959	16,854	21,453	20.55	20.51	21.23	21.84
40-45 ..	9,629	11,478	14,182	16,622	16.76	18.17	17.86	16.93
Totals	57,458	63,165	79,406	98,211	100.00	100.00	100.00	100.00

The average number of children to a marriage may be ascertained by comparing the number of legitimate births for a series of years with the marriages, but commencing with the marriages in the year preceding that for which the first number of births is taken. Calculating in this way the figures for the twenty-year period 1891-1910 show a decline from 4.64 to 3.07 as below :—

Year.	Marriages.		Legitimate Births.	Proportion of Births to every Marriage solemnized in the Preceding Year.
1890	..	..	3,797	..
1891	..	..	3,805	4.64
1892	..	..	4,002	4.54
1893	..	..	4,115	4.37
1894	..	..	4,178	4.33
1895	..	..	4,110	4.24
1896	..	..	4,843	4.32
1897	..	..	4,928	3.70
1898	..	..	5,091	3.68
1899	..	..	5,461	3.54
1900	..	..	..	3.41
1900	..	..	5,860	..
1901	..	..	6,095	3.34
1902	..	..	6,394	3.23
1903	..	..	6,748	3.26
1904	..	..	6,983	3.22
1905	..	..	7,200	3.24
1906	..	..	7,592	3.21
1907	..	..	8,192	3.15
1908	..	..	8,339	3.03
1909	..	..	8,094	3.03
1910	..	..	..	3.07

If the average result be taken out for the ten years 1891-1900, it will be found to represent 4·08 births to a marriage. Dealing similarly with the figures for 1901-10 the result is an average of 3·18, so that regarded annually or decennially there is a decided fall to be observed.

In March, 1901, New Zealand had 86,806 children living under the age of five years, and in April, 1906, the number was 102,745, an increase of 15,939, or 18·35 per cent., although the population at all ages increased in the quinquennium by only 14·99 per cent. Between 1891 and 1896 the increase was only 455, or 0·55 per cent., while between 1886 and 1891 the children living under five years actually decreased in number by 3,624, the increase of population of all ages (8·33 per cent.) being less than between 1891 and 1896 (12·24 per cent.), 1896 and 1901 (9·86 per cent.), or 1901 and 1906 (14·99 per cent.). The number of children under one year to the total population at all ages, and the proportion per 1,000, according to the results of five censuses, was :—

		Total Population (all Ages).	Children under One Year.	Children under One Year per 1,000 Population.
Census 1886	..	578,482	18,355	31·73
" 1891	..	626,658	16,443	26·24
" 1896	..	703,360	17,070	24·27
" 1901	..	772,719	18,381	23·79
" 1906	..	888,578	22,289	25·08

Thus, in 1886, with a population of 578,482 persons, there were 18,355 children under one year, against 22,289 children of that age in 1906, with a population of 888,578 persons.

The births registered in 1885 were 19,693, against 23,682 in 1905. The birth-rate fell from 34·35 per 1,000 of the population in 1885 to 27·22 in 1905.

Deducting 1,599, the number of deaths of children under one year registered in 1905, from 23,682, the number of births for that year, leaves 22,083, or within 206 of the living children under one year at the time of the last census.

New Zealand had in 1880 the highest birth-rate in Australasia (40·78); in 1900 the case was reversed; but in 1910 the New Zealand rate was higher than that of Victoria, and South Australia.

The birth-rate of New Zealand in 1909 was higher than the average of the Commonwealth, 26·40 per 1,000 of population; but in 1910, while the Commonwealth rate is the same as in 1909, the rate in New Zealand decreased to 26·17.

The movement over ten years is calculated as follows :—

BIRTH-RATES PER 1,000 OF POPULATION.

Country.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
Queensland ..	28.53	27.89	24.62	27.13	25.92	26.31	26.98	26.99	27.52	27.58
New South Wales ..	27.78	27.20	25.41	26.81	26.79	27.12	27.22	26.86	27.26	27.56
Victoria ..	25.77	25.23	24.46	24.65	24.83	25.14	25.16	24.71	24.55	24.12
South Australia ..	25.39	24.85	23.43	24.70	23.82	23.54	23.82	24.59	24.57	25.08
Western Australia ..	30.34	30.27	30.26	30.33	30.29	30.01	29.40	29.25	28.06	27.17
Tasmania ..	28.60	29.23	28.62	29.60	29.33	29.82	29.50	30.90	29.86	30.26
New Zealand..	26.34	25.89	26.61	26.94	27.22	27.08	27.30	27.45	27.29	26.17

A table is given in the Seventy-second Annual Report of the Registrar-General of England of such interest that it is reproduced here:—

LEGITIMATE-BIRTH RATES.

Country (Arranged in order of rates in 1900-2).	Proportion of Legitimate Births per 1,000 Wives aged 15-45 Years.			Increase (+) or Decrease (-) per Cent. in Fertility during 20 Years.
	Approximate Periods.			
	1880-2.	1890-2.	1900-2.	
<i>European Countries—</i>				
The Netherlands	347.5	338.8	314.6	- 9.5
Norway.. ..	314.5	306.8	302.8	- 3.7
Prussia	312.6	307.6	290.4	- 7.1
Ireland	282.9	287.6	289.4	+ 2.3
German Empire	310.2	300.9	284.2	- 8.4
Austria	281.4	292.4	283.7	+ 0.8
Scotland	311.5	296.4	271.8	-12.7
Italy	276.2	..	269.4	- 2.5
Sweden.. ..	293.0	280.0	269.0	- 8.2
Switzerland	284.1	274.0	265.9	- 6.4
Denmark	287.1	278.1	259.1	- 9.8
Spain	257.7	263.9	258.7	+ 0.4
Belgium	312.7	285.1	250.7	-19.8
England and Wales ..	286.0	263.8	235.5	-17.7
France	196.2	173.5	157.5	-19.7
<i>Australian Commonwealth—</i>				
Tasmania	..	311.0	256.4	..
Queensland	329.0	320.6	252.8	-23.2
Western Australia ..	323.9	338.8	246.4	-23.9
South Australia	326.5	307.5	235.0	-28.0
New South Wales ..	337.8	298.5	234.3	-30.6
Victoria	299.2	297.8	226.8	-24.2
New Zealand	322.1	277.5	243.2	-24.5

A further table shows the declining birth-rate and the marriage-rate in the United Kingdom.

BIRTH AND MARRIAGE RATES IN THE UNITED KINGDOM, 1886, 1891, 1896, 1901, 1906, 1908, AND 1909.

Year.	Mean Population.	Births.		Marriages.	
		Number.	Rate per 1,000 of Population.	Number.	Rate per 1,000 of Population.
1886	.. 36,313,582	1,145,577	31·5	241,180	6·6
1891	.. 37,802,440	1,148,259	30·4	275,970	7·3
1896	.. 39,599,072	1,152,144	29·0	296,089	7·5
1901	.. 41,550,773	1,162,975	28·0	313,351	7·5
1906	.. 43,661,092	1,170,622	26·8	325,842	7·5
1908	.. 44,546,822	1,173,759	26·3	337,593	7·2
1909	.. 45,005,833	1,145,813	25·5	313,286	6·9

The above figures are taken from the report of the Registrar-General of England (72nd number), published in 1910.

The birth-rates for ten years in Great Britain and certain countries of the European Continent are also given from the same source. The decline is steady and continuous, Ireland, where the rate is very low, being the least affected:—

BIRTH-RATES IN EUROPEAN COUNTRIES, 1900 TO 1909.

Countries.	Number of Births per 1,000 of Mean Population.									
	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
Hungary ..	39·3	37·8	38·8	36·7	37·0	35·7	36·0	36·0	36·3	37·0
Austria ..	37·3	36·6	37·0	35·2	35·5	33·7	34·9	33·8	33·5	..
Italy ..	33·0	32·6	33·4	31·7	32·8	32·5	31·9	31·5	33·4	32·4
German Empire	35·6	35·7	35·1	33·9	34·1	33·0	33·1	32·3	32·1	..
Netherlands ..	31·5	32·3	31·8	31·6	31·4	30·8	30·4	30·0	29·7	29·1
Scotland ..	29·6	29·5	29·2	29·2	28·7	28·1	27·9	27·0	27·2	26·4
Norway ..	29·9	29·6	29·0	28·8	28·1	27·4	26·7	26·3	26·2	26·1
England and Wales	28·7	28·5	28·5	28·4	27·9	27·2	27·1	26·3	26·5	25·6
Belgium ..	28·9	29·4	28·4	27·5	27·1	26·1	25·7	25·3	24·9	..
Sweden ..	27·0	27·0	26·5	25·7	25·8	25·7	25·7	25·5	25·7	25·6
Switzerland ..	28·6	29·1	28·7	27·7	27·7	27·4	27·4	26·8	27·1	..
Ireland ..	22·7	22·7	23·0	23·1	23·6	23·4	23·6	23·2	23·3	23·5
France ..	21·4	22·0	21·7	21·1	20·9	20·6	20·6	19·7	20·2	19·6

SEXES OF CHILDREN BORN.

The figures show that during each year there has been a preponderance of births of male children. It would appear, however, that this excess of male births is not sufficient to compensate for the heavier mortality which occurs among that sex. Of the total population in 1871 there were 70·52 females to every 100 males,

but in 1910 the proportion of the females to 100 males had risen to 89·21.

Year.	Number of Births of		Proportion of Births of Males to every 100 Females.
	Males.	Females.	
1888	9,641	9,261	104·1
1889	9,514	8,943	106·4
1890	9,293	8,985	103·4
1891	9,377	8,896	105·4
1892	9,101	8,775	103·7
1893	9,310	8,877	104·9
1894	9,472	9,056	104·6
1895	9,493	9,053	104·9
1896	9,511	9,101	104·5
1897	9,600	9,137	105·1
1898	9,615	9,340	102·9
1899	9,724	9,111	106·7
1900	10,107	9,439	107·1
1901	10,471	10,020	104·5
1902	10,653	10,002	106·5
1903	11,217	10,612	105·7
1904	11,762	11,004	106·9
1905	12,109	11,573	104·6
1906	12,397	11,855	104·6
1907	12,835	12,259	104·7
1908	13,369	12,571	106·3
1909	13,502	13,022	103·7
1910	13,442	12,542	107·2

TWIN BIRTHS.

There were 288 cases of twin births (576 children) and 2 cases of triplets registered in 1910. The number of children born was 25,984; the number of mothers was 25,692: thus, on an average, one mother in every 98 gave birth to twins, against 99 in 1909, 90 in 1908, 102 in 1907, and 114 in 1906.

The proportion of plural births per 1,000 of all births during the past five years, was:—

Year.	All Births.	Plural Births.	Plural Births per 1,000 of all Births.
1906	24,252	215	8·87
1907	25,094	244	9·72
1908	25,940	286	11·03
1909	26,524	266	10·03
1910	25,984	290	11·16

ILLEGITIMACY.

The births of 1,162 children were illegitimate: thus 45 in every 1,000 children born were born out of wedlock, against 46 in 1909.

The proportion of illegitimate births per 1,000 unmarried women—i.e., spinsters and widows—at the reproductive ages, covering a period of twenty years, is shown :—

Year.			Unmarried Women aged 15-45 Years.	Illegitimate Births.	Illegitimate-birth Rate per 1,000 Unmarried Women.
1886	..	..	56,277	602	10.70
1891	..	..	68,990	638	9.25
1896	..	..	89,722	834	9.30
1901	..	..	105,420	937	8.89
1906	..	..	116,506	1,132	9.72

The rate in New South Wales for 1905 was 16.24 per 1,000 unmarried women, in Victoria the rate was 10.31 for 1901, while in England and Wales the rate was as low as 8 for the year 1908. The average proportion of illegitimate births in Scotland in three years was 13.4 per cent., but in Ireland the extremely low average of 3.8 per cent. obtained.

The rates of illegitimacy in Australasia are quoted. That for 1909 in New Zealand was less than in most of the Australian States.

PROPORTION OF ILLEGITIMATE BIRTHS IN EVERY 100 BIRTHS

Year.	Queens- land.	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1900	6.40	7.01	5.91	4.24	4.82	5.43	4.63
1901	5.93	7.16	5.58	3.98	3.88	5.94	4.57
1902	6.04	6.60	5.51	4.36	3.96	5.36	4.46
1903	6.76	6.71	5.73	4.18	4.69	5.61	4.55
1904	6.89	7.12	5.74	4.01	4.36	5.82	4.52
1905	7.00	7.37	5.61	4.37	4.19	5.52	4.57
1906	7.68	7.04	5.58	4.00	4.78	5.78	4.67
1907	7.31	7.04	5.62	4.10	3.89	5.86	4.61
1908	7.45	6.89	5.76	4.33	4.35	4.97	4.26
1909	6.99	6.58	5.92	4.18	4.55	5.10	4.61

These figures show the proportion of illegitimate births to every 100 births for New Zealand to be fairly steady during the period 1900-9.

The figures in the next table give the percentages of illegitimate births to the total births in a number of foreign countries.

Country.	Illegitimate Births per Cent.	Country.	Illegitimate Births per Cent.
Germany	8·7	France	8·9
Switzerland	4·4	Belgium	6·4
Denmark	10·1	Netherlands	2·2
Portugal	11·4	Sweden	12·3
Austria	12·6	Norway	6·8
Hungary	9·6	Italy	5·5

THE LEGITIMATION ACT.

An important Act was passed in 1894 and re-enacted in 1908, entitled the Legitimation Act, which makes provision for the legitimation of children born before marriage on the subsequent intermarriage of their parents. Under this Act any child born out of wedlock, whose parents afterwards intermarry, is deemed to be legitimized by such marriage on the birth being registered in the manner prescribed by the Act. For legitimation purposes Registrars must register a birth when called upon to do so by any person claiming to be the father of an illegitimate child; but such person is required to make a solemn declaration that he is the father, and that at the time of the birth there existed no legal impediment to his marriage with the mother of the child. He has also to produce the evidence of his marriage. It will thus be seen that registration becomes the test of legitimacy. The following is the number of legitimations in each year, and the total to 1910, since the Act came into force:—

Year.	Number of Children Legitimized.	Year.	Number of Children Legitimized.
1894 ..	11	1904 ..	87
1895 ..	68	1905 ..	84
1896 ..	56	1906 ..	125
1897 ..	48	1907 ..	114
1898 ..	59	1908 ..	119
1899 ..	41	1909 ..	129
1900 ..	62	1910 ..	121
1901 ..	47		
1902 ..	96		
1903 ..	65	Total ..	1,332

The Act came into operation only during the latter end of 1894, which fact accounts for the small number of legitimations shown for that year.

MATERNITY HOMES AND THE REGISTRATION OF NURSES AND MIDWIVES.

There are four maternity homes now open for the use of the public, one at each of the principal centres. The St. Helens Hospital at Wellington was opened in June, 1905; that at Dunedin in October, 1905; that at Auckland in June, 1906; and that at Christchurch, in April, 1907. During the year ended 31st March, 1911, a total of 827 confinements had taken place in the four hospitals, and 355 confinements had been attended by the institution nurses outside the hospitals, as compared with 875 and 328 confinements respectively during the previous twelve months. These institutions are a development of the policy begun by legislation in 1901, when the Nurses Registration Act was passed, followed in 1904 by the Midwives Act, the latter providing that after a certain date only those midwives who were duly registered would be qualified to practise on their own account.

On 31st March, 1911, the number of registered midwives was 1,017. Of these 341 are trained and certificated, the remainder having satisfied the Registrar that at the date of the passing of the Act they had been for at least three years in *bona fide* practice as midwives, and that they bear a good character.

The maternity hospitals are not intended in any sense to be charitable institutions, and it is expected that they will be self-supporting.

Last year the net cost to the country of each baby born under the supervision of the St. Helens Hospitals staff was £1 14s. approximately.

There is a maternity hospital attached to the Medical School at Dunedin, which also serves as a training-school for medical students. During the year ended 31st March, 1911, there were 174 births in this institution.

Charitable Maternity Homes are established at Auckland, Otahuhu, Napier, Wellington, Christchurch, and Invercargill for the reception of unfortunate girls. The Salvation Army have similar institutions at Auckland, Wellington, Christchurch, and Dunedin.

The expenditure of the four St. Helens Maternity Hospitals and of the Dunedin Medical School Hospital for the years ended 31st March, 1910 and 1911, was as follows:—

<i>Expenditure.</i>				1909-10.	1910-11.
				£	£
Maintenance	..	..	..	5,323	5,841
Buildings	..	..	..	295	66
Administration	..	..	..	290	343
Other expenses	..	..	..	354	494
				6,262	6,744

The managers or trustees of the private maternity hospitals are not obliged to publish accounts, nor do they generally make public their financial operations.

The Nurses Registration Act provides that every person who has attained the age of twenty-three years and is certified as having had three years' training as a nurse in a recognized general hospital, together with systematic instruction in theoretical and practical nursing from the medical officer and the matron of that hospital, and who passes the prescribed examination, is entitled to registration. During the year ended 31st March, 1911, there were 125 candidates for the final examination in medical and surgical nursing, and 108 passed. At the end of the year there were 1,015 names on the register.

BIRTHS AND BIRTH-RATES IN THE FOUR CHIEF CITIES.

The total number of births registered as occurring in the four chief centres and suburbs in 1910 was 7,221, as against 7,463 for the previous year. The birth-rates last year were:—

		Birth-rates per 1,000 of Mean Population.
Auckland City	.. .. .	27·75
and seven suburban boroughs	..	26·01
Wellington City	.. .. .	24·13
and three suburban boroughs	..	24·19
Christchurch City	.. .. .	27·10
and three suburban boroughs	..	25·83
Dunedin City	.. .. .	27·22
and five suburban boroughs	..	25·29

By the inclusion of the suburbs the rate is lowered at Auckland, Christchurch, and Dunedin, but raised at Wellington. Excluding the suburbs, it will be observed that Auckland has the highest rate, Dunedin next highest, Christchurch and Wellington following. The birth-rate for the Dominion last year was 26·21 per thousand. Auckland, Christchurch, and Dunedin are thus over the average, and Wellington below it.

The birth-rates for the four central boroughs last year show a fall when compared with 1909. In Auckland the rate fell from 29·73 to 27·75; in Wellington from 26·62 to 24·13; in Christchurch from 28·55 to 27·10; in Dunedin from 28·34 to 27·22. The rates for five years, 1906 to 1910, are:—

	Births per 1,000 of Population.				
	1906.	1907.	1908.	1909.	1910.
Auckland (without suburbs) ..	29·96	29·63	30·56	29·73	27·75
Wellington ..	27·85	27·53	27·60	26·62	24·13
Christchurch ..	28·19	30·47	28·43	28·55	27·10
Dunedin ..	28·96	25·69	25·48	28·34	27·22

MARRIAGES.

A marriage may be solemnized after the delivery to the minister or Registrar who officiates of a certificate issued by a Registrar authorizing such marriage, and if any persons knowingly and wilfully intermarry without such certificate the marriage is null and void; and no clergyman or minister of any denomination is

empowered to solemnize marriages until his name has been placed on the Registrar-General's list of officiating ministers for the year.

Registrars of Marriages are prohibited by law from issuing certificates for the marriage of minors without the consent of the parents or lawful guardians, if there be any in New Zealand. If a declaration is made in any case that there is no such parent or lawful guardian resident in the Dominion, then a certificate may be issued after the expiration of fourteen days following the date on which the notice of intended marriage was given.

Marriage with a deceased wife's sister in New Zealand was legalized in the year 1880, and an Act was passed in the year 1900 which legalized marriage with the brother of a deceased husband. This Act is retrospective, including in its provisions marriages between such parties which had previously been solemnized as well as those contracted after the statute was passed, and declaring all these to be valid, and the issue born prior or subsequent to the passing of the Act to be deemed born in lawful wedlock.

The measure was reserved for the signification of her late Majesty's pleasure. The Royal assent has since been given, and the Act came into force in New Zealand by Proclamation dated the 22nd May, 1901.

The marriages for 1910 show an increase on the number for the previous year. The number was 8,236, or 142 more than in 1909. The rate per 1,000 of the population was 8·30 as against 8·33 in 1909. It is shown by the table following that there has been considerable increase in the marriage-rate, which has been above the standard during each of the last fifteen years :—

MARRIAGES, NUMBER AND RATE.

Year.	Total Number of Marriages Re- gistered.	Marriage-rate.		Year.	Total Number of Marriages Re- gistered.	Marriage-rate.	
		Per 1,000 of Popula- tion.	Compared with Rate in 1882-86 taken as 100.			Per 1,000 of Popula- tion.	Compared with Rate in 1882-86 taken as 100.
1882-86	3,663	6·68	100	1898	5,091	6·91	103
				1899	5,461	7·28	109
1887	3,563	5·97	89	1900	5,860	7·67	115
1888	3,617	5·97	89	1901	6,095	7·83	117
1889	3,632	5·93	89	1902	6,394	8·01	120
1890	3,797	6·12	92	1903	6,748	8·23	123
1891	3,805	6·04	90	1904	6,983	8·26	124
1892	4,002	6·23	93	1905	7,200	8·28	124
1893	4,115	6·22	93	1906	7,592	8·48	127
1894	4,178	6·15	92	1907	8,192	8·91	133
1895	4,110	5·94	89	1908	8,339	8·82	132
1896	4,843	6·85	103	1909	8,094	8·33	125
1897	4,928	6·83	102	1910	8,236	8·30	124

The marriage-rate, measured by the total population, does not show the true position when, as in the case of New Zealand, the age constitution of the people fluctuates considerably. A more satisfactory standard is found in the number of persons of marriageable age, defined as meaning the unmarried and widowed of males aged 20 years and upwards and of females aged 15 years and upwards. The rates are given for four census years :—

Year of Census.	Proportion of Unmarried per 1,000 of Total		Proportion of Marriages per 1,000 of the			
	Males.	Females.	Marriageable Men.	Marriageable Women.	Marriageable Persons.	Total Population.
1891	246·2	267·8	46·22	48·10	47·14	6·04
1896	264·2	308·3	49·11	47·09	48·08	6·85
1901	278·3	330·6	53·56	49·96	51·69	7·83
1906	295·8	326·9	54·09	55·15	54·62	8·48

A comparison of the marriage-rate for each State of the Australian Commonwealth with New Zealand over a series of years is given. For the Commonwealth the rate in 1901 was 7·32, and in 1910 it was 8·27 per 1,000 of mean population.

MARRIAGES PER 1,000 OF THE POPULATION IN AUSTRALIA AND NEW ZEALAND.

Year.	Queensland.	New South Wales.	Victoria.	South Australia (Proper).	Western Australia.	Tasmania.	New Zealand.
1891 ..	7·18	7·39	7·69	7·31	8·00	6·63	6·04
1892 ..	6·67	6·77	6·64	6·51	7·29	6·51	6·23
1893 ..	5·91	6·40	5·99	6·26	6·34	5·51	6·22
1894 ..	5·70	6·20	5·98	6·09	6·24	5·43	6·15
1895 ..	6·23	6·35	6·00	5·88	6·83	5·32	5·94
1896 ..	6·05	6·59	6·48	6·20	8·45	5·88	6·85
1897 ..	6·05	6·72	6·36	5·46	10·73	6·23	6·83
1898 ..	6·03	6·66	6·53	6·18	9·89	6·29	6·91
1899 ..	6·78	6·89	7·01	6·24	9·89	6·37	7·28
1900 ..	6·88	7·38	6·96	6·50	10·27	7·71	7·67
1901 ..	6·66	7·73	6·98	6·36	9·66	7·76	7·83
1902 ..	6·36	7·54	7·00	6·54	9·83	7·55	8·01
1903 ..	5·72	6·89	6·29	6·21	9·32	7·57	8·23
1904 ..	5·93	7·23	6·80	6·86	8·83	7·55	8·26
1905 ..	6·03	7·44	7·24	6·94	8·48	7·62	8·28
1906 ..	6·73	7·65	7·30	7·06	8·70	7·82	8·48
1907 ..	7·62	7·86	7·73	7·98	8·06	7·86	8·91
1908 ..	7·30	8·00	7·42	7·84	7·59	7·88	8·82
1909 ..	8·04	8·11	7·34	8·00	7·37	8·11	8·33
1910 ..	8·13	8·68	7·86	8·72	7·55	8·09	8·30

The rate for New Zealand is higher than the rate for the European countries given in the table following.

MARRIAGES IN EVERY 1,000 OF THE POPULATION OF EUROPEAN COUNTRIES, 1909.

Hungary	8.5
Italy	7.7
German Empire (1908)	8.0
France	7.9
Belgium (1908)	7.8
Switzerland (1908)	7.8
Austria (1908)	7.6
England and Wales	7.3
Denmark	7.3
Netherlands	7.1
Spain	6.5
Scotland	6.2
Sweden	6.0
Norway	6.0
Ireland	5.2

CONDITION OF CONTRACTING PARTIES.

Of the marriages contracted in 1910, those between bachelors and spinsters comprised 90 per cent. The number under each heading for the ten years 1901-10 is stated below :—

Year.	Marriages contracted between				Of Divorced Persons (included previously).	Of Minors (included in previous columns).
	Bachelors and Spinsters.	Bachelors and Widows.	Widowers and Spinsters.	Widowers and Widows.		
1901 ..	5,549	180	271	95	84	1,164
1902 ..	5,803	199	292	100	76	1,150
1903 ..	6,133	198	305	112	86	1,189
1904 ..	6,365	210	307	101	87	1,351
1905 ..	6,582	196	316	106	87	1,347
1906 ..	6,925	265	286	116	98	1,329
1907 ..	7,499	231	335	127	128	1,427
1908 ..	7,622	254	344	119	129	1,515
1909 ..	7,375	230	357	132	152	1,452
1910 ..	7,440	306	342	148	150	1,454

Divorced men and women have been classified as bachelors or spinsters: 62 divorced men and 88 divorced women were married during the last year.

Included amongst widows in 1910 are seven married women, and amongst the widowers one man married, who elected to go through the form of marriage with other persons under the protection of the provisions of section 224, subsection (5), of the Crimes Act, which reads, "No one commits bigamy by going through a form of marriage if he or she has been continually absent from his or her wife or husband for seven years then last past, and is not proved to have known that his wife or her husband was alive at any time during those seven years."

The total number of marriages solemnized does not include marriages where both parties are of the aboriginal Native race, such persons being exempted from the necessity of complying with the provisions of the Marriage Act, although at liberty to take advantage thereof. One hundred and sixty-nine marriages in which both parties were Maoris were contracted in 1910 in terms of the Act: 25 by Registrars, 78 by clergymen of the Church of England, 4 by a Presbyterian minister, 34 by Roman Catholic ministers, 10 by ministers of the Church of the Latter-day Saints, 16 by Methodist ministers, and 2 by Salvation Army. One marriage was again solemnized by the Church of Christ.

BACHELORS AND SPINSTERS IN NEW ZEALAND.

The results of three censuses in respect of the number of bachelors of 20 years and upwards, and spinsters of 15 years and upwards, show some interesting features. In 1891 there was an excess of bachelors over the spinsters amounting to 3,497 men. But by 1896 not only had the preponderance of the male element been lost, but an excess of spinsters over bachelors was reported amounting to 1,786 women, while in 1901 this excess had risen to 3,572 women. The census of 1906 disclosed the fact that there was a considerable excess of bachelors, amounting to 9,633. This result, no doubt, is largely due to the arrival from abroad of numbers of young men who have settled in New Zealand.

It is noticeable how differently the numbers for the provincial districts have been affected by the process in operation. An excess of bachelors was preserved in Auckland, Taranaki, Hawke's Bay, Wellington, Marlborough, Nelson, and Westland from 1891 to 1906. In Canterbury, however, an excess of spinsters was found in 1891 of 2,516, which increased to 3,997 in 1896 and to 4,918 in 1901, but decreased to 2,117 in 1906; while in Otago an excess of 773 spinsters in 1891 increased to 2,066 in 1896, diminished in 1901.

when there were 1,899 more spinsters than bachelors, and again in 1906, when the number of spinsters was 954 greater than the number of bachelors. These two important districts of the South Island have lost large numbers of bachelors by departures to the North Island. The following table exhibits the particulars for each provincial district:—

Provincial Districts.	Census, 1891.		Census, 1896.		Census, 1901.		Census, 1906.	
	Excess of Bachelors over Spinsters.	Excess of Spinsters over Bachelors.	Excess of Bachelors over Spinsters.	Excess of Spinsters over Bachelors.	Excess of Bachelors over Spinsters.	Excess of Spinsters over Bachelors.	Excess of Bachelors over Spinsters.	Excess of Spinsters over Bachelors.
Total excess ..	3,497	..	..	1,786	..	3,572	9,633	..
Auckland ..	156	..	703	..	521	..	3,233	..
Taranaki ..	121	..	524	..	805	..	754	..
Hawke's Bay ..	1,337	..	1,142	..	425	..	1,151	..
Wellington ..	2,129	..	637	..	32	..	4,389	..
Marlborough ..	644	..	183	..	158	..	532	..
Nelson ..	1,486	..	580	..	637	..	1,550	..
Westland ..	900	..	501	..	666	..	935	..
Canterbury ..	..	2,516	..	3,997	..	4,918	..	2,117
Otago ..	..	773	..	2,066	..	1,899	..	954
Chatham Islands ..	15	..	7	..	1	..	10	..
Kermadec Islands ..	..	2	..	..	..	..	..	..

AGES OF PERSONS MARRIED.

Of the persons married in 1910, 161 bridegrooms and 1,293 brides were under 21 years of age. Of the bridegrooms, two were between 17 and 18, and fifteen between 18 and 19. Of the brides, seven were between 15 and 16, and thirty-four were between 16 and 17 years of age. The proportion of men married is greatest at the ages of 25 to 30, and of women at from 21 to 25 years.

The following are the proportions of men and women married at each age-period to every 100 marriages in the years 1891, 1901, and 1910:—

Age.	1891.		1901.		1910.	
	M.	F.	M.	F.	M.	F.
Under 21 years ..	1.55	20.79	1.93	17.16	1.95	15.70
21 and under 25 ..	26.99	43.99	24.94	39.97	21.81	35.34
25 " 30 ..	36.19	22.97	37.08	26.89	38.94	28.96
30 " 40 ..	25.94	8.72	27.12	12.73	29.31	15.88
40 " 50 ..	6.44	2.71	6.04	2.44	5.16	2.93
50 " 60 ..	2.26	0.66	1.77	0.57	1.64	0.80
60 " 70 ..	0.55	0.16	0.92	0.24	0.92	0.30
70 and upwards ..	0.08	..	0.20	..	0.27	0.09

MEAN AGE AT MARRIAGE.

Year.			Mean Age of Bridegrooms.	Mean Age of Brides.
1895	..	..	29.90	25.05
1896	..	..	29.74	25.28
1897	..	..	29.62	25.21
1898	..	..	29.95	25.30
1899	..	..	29.86	25.48
1900	..	..	29.91	25.29
1901	..	..	29.72	25.54
1902	..	..	29.89	25.63
1903	..	..	29.89	25.84
1904	..	..	29.60	25.44
1905	..	..	29.65	25.75
1906	..	..	29.76	25.97
1907	..	..	29.83	26.07
1908	..	..	29.86	26.11
1909	..	..	30.11	26.40
1910	..	..	29.91	26.32

The average age of bridegrooms has remained fairly constant during the period, but there is a gradual increase in the average age of the brides. In England the mean age of those whose ages were stated was (in the year 1909) 28.88 years for men, and 26.69 years for women. Thus the average age at marriage in New Zealand would appear to be higher for men, but lower for women, than in England.

The proportion of bridegrooms under 21 is much greater in England than in New Zealand, and the proportion of brides under 21 somewhat lower.

In England, in 1909, of every 1,000 bridegrooms whose ages were stated, 40 were under 21 years of age, and of every 1,000 brides 137 were under 21 years of age. In New Zealand, in 1910, the proportions were 20 bridegrooms and 157 brides of similar ages in every 1,000 married :—

Year.				Bridegrooms under 21 in every 100.	Brides under 21 in every 100.
1890	..	..	..	1.89	22.75
1892	..	..	..	1.62	20.14
1894	..	..	..	1.44	19.53
1896	..	..	..	1.96	19.51
1898	..	..	..	1.57	18.13
1900	..	..	..	1.67	17.34
1901	..	..	..	1.93	17.16
1904	..	..	..	1.73	17.61
1905	..	..	..	1.80	16.90
1906	..	..	..	1.65	15.86
1907	..	..	..	1.60	15.82
1908	..	..	..	2.12	16.05
1909	..	..	..	1.76	16.17
1910	..	..	..	1.95	15.70

The ages at which persons may contract binding marriages are the same as in England—12 years for females and 14 for males. Marriage may be contracted at earlier ages than those

stated, but would be voidable at the discretion of either of the parties upon reaching the age of 12 or 14, as the case may be, and without the necessity of proceedings in Court.

Although in New Zealand the age at which girls may legally marry is as above, nevertheless, by the criminal law, to unlawfully carnally know a girl under the age of 16 years is now a punishable offence. The age of consent was raised from 15 to 16 by statute passed in 1906.

OCCUPATIONS OF BRIDEGROOMS.

The bridegrooms married during 1910 are given below according to their occupations, arranged in the classification used at the census of 1906.

OCCUPATIONS AND AGES OF BRIDEGROOMS, 1910.

Occupation.	Total Bride- grooms.	Age Groups.				
		Under 20.	20-24	25-44	45-64	65 and Upwards.
Professional class	507	2	71	406	27	1
Domestic class	219	3	57	149	9	1
Mercantile class	1,402	7	292	1,053	43	7
Engaged in transport and communication	732	12	197	495	27	1
Engaged in manufacturing ..	1,155	9	307	807	27	5
Engaged in building and construction	704	7	204	469	20	4
Industrial workers imperfectly defined	1,406	12	381	952	54	7
Agricultural and pastoral class..	1,778	5	310	1,336	114	13
Working in mines and quarries..	230	1	57	166	3	3
Other primary producers ..	73	1	19	47	5	1
Independent means	22	..	2	6	9	5
Occupations not stated	8	..	1	6	..	1
Totals	8,236	50	1,898	5,892	338	49

MARRIAGE REGISTER SIGNED BY MARK.

Of the men married in 1910, 18, or 2·19 in every 1,000, and of the women 15, or 1·82 per 1,000, signed the register by marks.

The illiteracy of the people, as measured by the proportion of married persons who affix marks instead of signatures to the marriage register, has greatly decreased of late, having fallen since 1881 from 32·04 per 1,000 among men to 2·19 per 1,000, and from 57·98 per 1,000 to 1·82 per 1,000 among women. This is shown by the following table:—

PERSONS IN EVERY 1,000 MARRIED WHO SIGNED BY MARK.

	1881.	1891.	1901.	1907.	1908.	1909.	1910.
Male ..	32·04	13·93	4·59	1·46	1·80	2·47	2·19
Female ..	57·98	16·82	6·23	3·05	2·25	3·58	1·82

The numbers upon which the above rates are worked are small, and they should not be used as a basis for any conclusion as to the education of the people as a whole.

MARRIAGES BY MINISTERS OF VARIOUS DENOMINATIONS.

The following table shows the proportions of marriages by ministers of the principal denominations in the past five years:—

Denomination.	Percentage of Marriages.				
	1906.	1907.	1908.	1909.	1910.
Church of England	24·93	24·38	24·96	24·27	24·38
Presbyterians	25·75	26·23	26·37	25·72	26·20
Methodists	14·94	14·95	14·58	14·84	14·49
Roman Catholics	11·12	11·22	11·02	10·93	11·85
Other denominations	6·30	7·99	7·84	7·97	6·31
By Registrars	16·96	15·23	15·23	16·27	16·77
	100·00	100·00	100·00	100·00	100·00

The above figures must not be taken as a true indication of the religions of the parties married, as it does not necessarily follow that both parties are members of the church whose officiating minister performed the ceremony, and persons married by Registrars may belong, in greater or lesser proportion, to any of the denominations.

NUMBER OF MINISTERS.

The number of names on the list of officiating ministers under the Marriage Act is (July, 1911) 1,382, and the denominations to which they belong are shown hereunder:—

Denomination.	No.	Denomination.	No.
Specified in statute—		Not specified in statute—	
Church of England	409	Church of Christ	28
Presbyterian Church of New Zealand	314	Free Methodist Church of New Zealand	4
Roman Catholic Church ..	218	Latter-day Saints	
Methodist Church of Australasia in New Zealand	210	Salvation Army	27
Congregational Independents..	30	Catholic Apostolic Church ..	4
Baptists	42	Unitarians	3
Primitive Methodist Connexion	53	Brethren	6
Lutheran Church	10	Others	15
Hebrew Congregations ..	6	Total	1,382

DEATHS.

The deaths in 1910 numbered 9,639, a rate of 9·71 in every 1,000 persons living, as against 9·22 in 1909. This is below the average of the previous ten years, 9·80 per 1,000.

The following table shows the number of deaths, and the death-rate per 1,000 of the living population ; also a comparison with the average rate for 1882-86 :—

Year.	Total Number of Deaths.	Death-rate.		Year.	Total Number of Deaths.	Death-rate.	
		Per 1,000 of Population.	Compared with Rate in 1882-86 taken as 100			Per 1,000 of Population.	Compared with Rate in 1882-86 taken as 100.
1882-86..	5,944	10·84	100	1898	7,244	9·84	91
				1899	7,680	10·24	94
1887 ..	6,137	10·29	95	1900	7,200	9·43	87
1888 ..	5,708	9·43	87	1901	7,634	9·81	90
1889 ..	5,772	9·44	87	1902	8,375	10·50	97
1890 ..	5,994	9·66	89	1903	8,528	10·40	96
1891 ..	6,518	10·35	95	1904	8,087	9·57	88
1892 ..	6,459	10·06	93	1905	8,061	9·27	86
1893 ..	6,767	10·23	94	1906	8,339	9·31	86
1894 ..	6,918	10·19	94	1907	10,066	10·95	101
1895 ..	6,863	9·91	91	1908	9,043	9·57	88
1896 ..	6,432	9·10	84	1909	8,959	9·22	85
1897 ..	6,595	9·14	84	1910	9,639	9·71	89

The death-rates of males and females for the last ten years are shown separately in the next table, and also the number of male deaths to every 100 female deaths :—

Year.	Deaths per 1,000 of the Total Population.			Deaths of Males to every 100 Females.
	Males.	Females.	Total.	
1901	10·80	8·71	9·81	124
1902	11·64	9·23	10·50	126
1903	11·43	9·24	10·40	124
1904	10·64	8·37	9·57	127
1905	10·18	8·24	9·27	124
1906	10·40	8·08	9·31	129
1907	11·81	9·98	10·95	118
1908	10·62	8·38	9·57	127
1909	10·18	8·14	9·22	125
1910	10·67	8·63	9·71	124

Males of tender years are more delicate than females, and, later in life, more liable to accident. These disadvantages are partly compensated by the preponderance of male births, but the tendency of

the natural increase is towards an equalization in the numbers of the sexes.

For the purpose of considering the mortality in New Zealand more closely than can be done by means of crude death-rates, it is desirable to ascertain the rates at different age-periods of the population.

DEATH-RATES PER 1,000 LIVING AT VARIOUS AGE-PERIODS.

Ages.			Average, 1902-6.	1908.	1909.	1910.	Decrease per Cent. in 1910, compared with 1902-6.
Under 5 years	..	..	21·75	20·38	18·77	19·48	10·44
5 years and under 10 years			2·07	1·76	1·96	1·85	10·63
10	"	15	1·64	1·64	1·35	1·21	26·22
15	"	20	2·64	2·03	2·23	2·06	21·97
20	"	25	3·69	3·42	3·08	2·82	23·58
25	"	35	4·55	4·37	4·43	4·54	0·22
35	"	45	6·30	6·24	6·71	6·06	3·81
45	"	55	10·35	10·47	9·73	9·54	7·83
55	"	65	20·26	18·06	17·97	19·53	3·60
65	"	75	47·06	44·75	42·62	45·60	3·10
75 and upwards	..	..	124·65	132·36	125·91	162·03	+ 29·91
All ages	..	..	9·81	9·57	9·22	9·71	1·02

Besides advantages of climate New Zealand possesses a population younger in age constitution than that of most other countries, conditions favourable to a low rate of mortality. Another table is given comparing death-rates at twelve age-periods for 1909 with those of England and Wales. Here the extremely low rate of mortality among children under five years of age is remarkable, and the difference at some of the groups at the more advanced ages is considerable. The New Zealand rate for males is higher than that for females at all groups excepting 5-10, 10-15, 35-45, and 85

and upwards, while for England and Wales the female rate is greater than that for males at 5-10 and 10-15 years, and is lower in every other instance.

DEATH-RATE PER 1,000 PERSONS LIVING, ACCORDING TO SEX, FOR THE YEAR 1909, COMPARED WITH ENGLAND AND WALES.

Ages.					Deaths per 1,000 persons living.			
					New Zealand.		England and Wales.	
					Males.	Females.	Males.	Females.
Under 5 years	..	..	..	..	20·7	16·7	40·3	33·2
5 years and under 10 years	..	..	..	..	1·9	2·02	3·2	3·3
10	15	"	..	..	1·8	1·4	1·9	2·0
15	20	"	..	..	2·6	1·8	2·8	2·6
20	25	"	..	..	3·2	2·9	3·7	3·1
25	35	"	..	..	4·4	4·4	5·3	4·4
35	45	"	..	..	6·6	6·9	9·1	7·4
45	55	"	..	..	10·3	8·9	16·4	13·0
55	65	"	..	..	19·5	15·9	32·8	25·7
65	75	"	..	..	43·2	41·7	73·5	61·4
75	85	"	..	..	127·2	92·2	141·8	129·9
85 and upwards	..	..	..	..	236·2	202·5	321·4	300·0
All ages	..	..	..	..	10·2	8·1	15·4	13·7

Perfect accuracy in comparing one country with another can only be attained by the use of what is termed an "index of mortality." The proportions of the living vary in regard to the different age-groups, and the ordinary death-rate—which is calculated on the population as a whole—does not afford a true means of judging of the relative healthiness of the places compared. But by taking a population like that of Sweden, and applying the percentage at each age-group to the death-rates, a standard of health or index of mortality can be arrived at. This has been done for New Zealand, in accordance with a resolution of the Statistical Conference held at Hobart in 1902, and the result is expressed in tabular form.

INDEX OF MORTALITY IN NEW ZEALAND FOR 1910.

Ages.	Estimated Mean Population, 1910.	Number of Deaths, 1910.	Death-rate per 1,000, 1910.	Percentage of Population of Sweden, 1890 (Standard).	Index of Mortality in New Zealand per 1,000.
Under 1 year ..	24,919	1,760	70.63	2.55	1.80
1 and under 20 years	365,153	983	2.69	39.80	1.07
20 and under 40 years	375,378	1,675	4.46	26.96	1.20
40 and under 60 years	157,260	1,389	8.83	19.23	1.70
60 years and upwards	70,092	3,832	54.67	11.46	6.27
Totals ..	992,802	9,639	9.71	100.00	12.04

A similar calculation for the States of the Australian Commonwealth has been made for 1909. The results, when compared with the actual rates, exhibit to what degree the age-constitution of the population affects the death-rate. The figures for New Zealand are also given.

			Year 1909.	
			Index.	Actual.
New South Wales	..	..	13.44	9.85
Victoria	..	..	13.74	11.24
Queensland	..	..	13.80	9.79
South Australia	..	..	12.57	9.37
Western Australia	..	..	15.07	9.98
Tasmania	..	..	13.14	10.00
New Zealand	..	..	11.30	9.22

COMPARATIVE DEATH-RATE FOR THE PERIOD 1900 TO 1910.

Country.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
New Zealand ..	9.43	9.81	10.50	10.40	9.57	9.27	9.31	10.95	9.57	9.22	9.71
Queensland ..	11.73	11.88	12.08	12.38	10.11	10.47	9.56	10.35	10.34	9.79	9.80
New South Wales	11.16	11.75	11.97	11.65	10.65	10.16	9.92	10.58	10.16	9.84	9.80
Victoria ..	12.75	13.22	13.40	12.90	11.92	12.10	12.42	11.66	12.53	11.24	11.30
South Australia* ..	10.64	11.11	11.79	10.71	10.22	10.14	10.34	9.72	9.84	9.37	9.71
Western Australia	12.92	13.36	13.63	12.60	11.91	10.83	11.87	11.17	10.86	9.98	9.81
Tasmania ..	11.05	10.52	11.00	11.92	11.04	10.29	11.24	11.14	11.71	10.00	11.49
England and Wales	13.2	16.9	16.2	15.4	16.2	15.2	15.4	15.0	14.7	14.5	..
Scotland ..	18.5	17.9	17.2	16.6	16.9	15.9	16.0	16.2	16.1	15.3	..
Ireland ..	19.6	17.8	17.5	17.5	18.1	17.1	17.0	17.7	17.6	17.2	..
Denmark ..	16.8	15.8	14.6	14.7	14.1	15.0	13.5	14.2	14.5	13.1	..
Norway ..	15.8	14.9	13.8	14.8	14.3	14.8	13.7	14.2	14.3	13.5	..
Sweden ..	16.8	16.1	15.4	15.1	15.3	15.6	14.4	14.6	14.9	13.7	..
Austria ..	25.3	24.0	24.7	23.8	23.7	25.0	22.4	22.6	22.3	..	..
Hungary ..	26.9	25.4	27.0	26.1	24.8	27.8	24.8	25.2	24.8	25.1	..
Switzerland ..	19.3	18.0	17.2	17.6	17.8	17.9	17.0	16.8	16.2	..	..
German Empire ..	22.1	20.7	19.5	20.0	19.6	19.8	18.2	18.0	18.1	..	..
Netherlands ..	17.8	17.2	16.3	15.6	15.9	15.3	14.8	14.6	15.0	13.7	..
France ..	21.9	20.1	19.5	19.2	19.4	19.6	19.9	20.2	19.0	19.3	..
Italy ..	23.8	22.0	22.2	22.4	21.1	21.9	20.8	20.7	22.6	21.4	..

* Excluding the Northern Territory.

Considering the range of this statement New Zealand is conspicuous as showing the lowest death-rate. The rates for the principal Australian States are a little higher, but, generally speaking, far below those for the United Kingdom or the European Continental States mentioned in the table.

AGES AT DEATH.

The deaths occurring during 1910 are tabulated below in single ages up to five years, and from thence in groups, showing males and females separately:—

Ages.					Males.	Females.	Total.
Under 1 month	..	..	..	..	459	327	786
1 month and under 3 months	..	..	..	..	177	121	298
3 months	6	..	..	..	165	168	333
6 "	12	..	..	..	191	152	343
Total under 1 year					992	768	1,760
1 year	..	..	..	..	134	119	253
2 years	..	..	..	..	50	45	95
3 "	..	..	..	..	48	28	76
4 "	..	..	..	..	27	27	54
Total under 5 years					1,251	987	2,238
5 years and under 10 years	..	..	..	..	106	81	187
10 "	15	..	..	..	73	44	117
15 "	20	..	..	..	100	101	201
20 "	25	..	..	..	162	136	298
25 "	30	..	..	..	197	183	380
30 "	35	..	..	..	218	208	426
35 "	40	..	..	..	197	178	375
40 "	45	..	..	..	196	144	340
45 "	50	..	..	..	220	135	355
50 "	55	..	..	..	230	165	395
55 "	60	..	..	..	314	181	495
60 "	65	..	..	..	314	215	529
65 "	70	..	..	..	417	282	699
70 "	75	..	..	..	583	316	899
75 "	80	..	..	..	533	322	855
80 "	85	..	..	..	312	222	534
85 "	90	..	..	..	132	90	222
90 "	95	..	..	..	36	40	76
95 "	100	..	..	..	13	5	18
100 years	..	..	..	..	1	..	1
102 "	..	..	..	..	1	..	1
Totals ..					5,604	4,035	9,639

The average age at death of persons of either sex, in each of the ten years 1901-10, was as follows:—

Males.		Females.		Males.		Females.	
1901 ..	41.64 years	37.68 years.		1906 ..	44.39 years	39.35 years.	
1902 ..	41.07 "	34.88 "		1907 ..	40.43 "	36.66 "	
1903 ..	39.56 "	35.43 "		1908 ..	42.50 "	39.14 "	
1904 ..	41.47 "	38.44 "		1909 ..	42.76 "	38.78 "	
1905 ..	43.03 "	39.13 "		1910 ..	44.47 "	42.25 "	

The average expectation of life at each year of age has been compiled from a table given in a paper on the rates of mortality in New Zealand which was published by Mr. George Leslie. This is the most up-to-date information procurable.

The table shows, on comparison with New South Wales figures (Coghlan's), that at birth the expectation of life to the male infant in New Zealand is considerably greater than in that State, the figures being 54.44 years (N.Z.), against 49.6 (N.S.W.), and for females 57.26 and 52.9.

At 21 years of age the expectation in New Zealand for males is 43.77 years, against 41.35 (N.S.W.), and for females 45.59, against 43.62.

At age 45 the comparison is, for males, 25.23 years (N.Z.), 23.27 (N.S.W.); females, 27.46 years (N.Z.), against 25.34 (N.S.W.).

At the age of 70, the limit of a normal life, the figures for New Zealand are—males 9.48 years, females 10.23, against 8.64 for both sexes in New South Wales.

EXPECTATION OF LIFE IN NEW ZEALAND.

Age.	Average Duration of Life: Years.		Age.	Average Duration of Life: Years.		Age.	Average Duration of Life: Years.	
	Male.	Female.		Male.	Female.		Male.	Female.
0	54.444	57.260	35	32.829	34.954	70	9.481	10.227
1	59.102	61.214	36	32.054	34.215	71	8.988	9.673
2	59.169	61.290	37	31.282	33.475	72	8.504	9.130
3	58.626	60.647	38	30.511	32.734	73	8.035	8.604
4	57.924	59.954	39	29.744	31.990	74	7.586	8.095
5	57.167	59.148	40	28.979	31.243	75	7.160	7.614
6	56.396	58.343	41	28.220	30.493	76	6.758	7.164
7	55.606	57.520	42	27.465	29.739	77	6.379	6.742
8	54.791	56.680	43	26.715	28.981	78	6.022	6.349
9	53.956	55.825	44	25.971	28.221	79	5.683	5.982
10	53.094	54.953	45	25.231	27.458	80	5.362	5.636
11	52.212	54.069	46	24.499	26.694	81	5.055	5.312
12	51.315	53.180	47	23.773	25.927	82	4.765	5.005
13	50.425	52.294	48	23.055	25.163	83	4.489	4.714
14	49.539	51.415	49	22.344	24.399	84	4.229	4.439
15	48.663	50.545	50	21.636	23.640	85	3.982	4.180
16	47.803	49.690	51	20.932	22.885	86	3.747	3.935
17	46.960	48.847	52	20.231	22.135	87	3.525	3.705
18	46.139	48.016	53	19.530	21.392	88	3.313	3.487
19	45.336	47.198	54	18.836	20.655	89	3.110	3.283
20	44.551	46.393	55	18.150	19.926	90	2.914	3.089
21	43.775	45.593	56	17.478	19.202	91	2.723	2.905
22	43.005	44.803	57	16.822	18.485	92	2.525	2.731
23	42.235	44.021	58	16.183	17.776	93	2.323	2.564
24	41.463	43.244	59	15.560	17.077	94	2.101	2.400
25	40.684	42.474	60	14.949	16.386	95	1.843	2.238
26	39.899	41.708	61	14.348	15.705	96	1.553	2.082
27	39.108	40.946	62	13.754	15.037	97	1.247	1.931
28	38.319	40.187	63	13.170	14.386	98	0.960	1.774
29	37.526	39.431	64	12.600	13.752	99	0.677	1.600
30	36.736	38.678	65	12.046	13.135	100	0.500	1.424
31	35.949	37.928	66	11.512	12.534	101	...	1.195
32	35.165	37.181	67	10.994	11.945	102	...	0.889
33	34.384	36.438	68	10.486	11.365	103	...	0.500
34	33.605	35.695	69	9.981	10.792			

BIRTHPLACES.

TABLE SHOWING THE BIRTHPLACES AND AGES OF THE PERSONS (MALES AND FEMALES) WHO DIED DURING THE YEAR 1910.

Birthplace.	Ages.								Totals.
	Under 10	10-20	20-30	30-40	40-50	50-60	60-70	70 and upwards.	
<i>British.</i>									
Australasia—									
New Zealand ..	2,397	290	528	473	273	181	76	17	4,235
Queensland ..	..	1	..	1	3	..	..	..	5
New South Wales ..	3	1	13	14	7	9	12	12	71
Victoria ..	3	6	14	20	22	29	15	1	110
South Australia ..	..	1	4	2	1	1	1	1	11
Western Australia ..	1	1	..	..	..	1	..	..	3
Tasmania ..	2	2	3	7	4	11	14	18	61
Australia (State not named)	..	..	..	3	1	3	2	3	12
United Kingdom—									
England and Wales	12	8	54	131	166	266	486	1,100	2,223
Scotland ..	2	3	16	44	58	121	235	615	1,094
Ireland ..	1	..	13	29	67	149	230	504	993
Other British possessions—									
India ..	..	..	2	2	2	3	8	9	26
North America ..	..	..	1	..	4	7	7	30	49
South Africa ..	..	..	..	1	4	..	..	4	9
Others ..	..	..	1	..	..	4	3	3	11
<i>Foreign.</i>									
Austria ..	..	..	1	1	..	1	..	4	7
Denmark ..	..	..	1	3	2	5	6	14	31
Finland ..	..	..	..	..	1	..	..	..	1
France ..	..	..	1	..	2	3	4	8	18
Germany ..	..	..	..	2	5	10	14	51	82
Italy ..	..	..	1	..	..	1	1	3	6
Norway ..	..	..	1	4	3	1	5	11	25
Poland ..	..	..	..	1	..	..	..	..	1
Russia ..	..	..	..	1	1	1	..	1	4
Sweden ..	..	..	..	1	1	10	6	16	34
Switzerland ..	..	..	1	1	3	2	2	3	12
United States of America	..	..	3	3	6	6	5	7	30
China ..	..	..	..	1	5	6	11	12	35
Others ..	..	..	1	1	3	2	2	10	19
At sea ..	1	..	..	5	7	1	4	3	21
Unspecified ..	3	5	19	50	44	56	79	144	400
All ages ..	2,425	318	678	801	695	890	1,228	2,604	9,639

OCCUPATIONS OF DECEASED MALES, 1910.

The occupations of males who died during 1910, arranged according to the census classification, are shown in the following table:—

Occupations.	Number of Deaths of Males.	Age-groups.					
		Under 15.	15 and under 20.	20 and under 25.	25 and under 45.	45 and under 65.	65 Years and upwards.
CLASS I.—PROFESSIONAL.							
General Government	13	..	..	1	1	4	7
Local Government	7	..	..	..	..	2	5
Defence	1	..	..	..	1	..	..
Law and order	43	..	2	1	12	12	16
Religion	15	..	..	..	3	7	5
Officer of benevolent institution ..	3	..	..	..	1	2	..
Health	31	..	..	2	10	10	9
Literature	10	..	..	..	2	1	7
Science	1	..	..	..	1	..	..
Civil, mechanical engineering, architec- ture, and surveying ..	22	..	1	..	2	4	15
Education	25	..	1	1	3	6	14
Fine arts	10	..	..	1	2	1	6
Music	4	..	..	..	1	1	2
Amusements	10	..	1	..	6	3	..
Total Professional	195	..	5	6	45	53	86
CLASS II.—DOMESTIC.							
Hotelkeepers and assistants	43	..	..	..	13	22	8
Others engaged in providing board and lodging ..	8	..	..	1	1	4	2
House servants	29	..	..	..	9	12	8
Coachmen and grooms	9	..	..	..	6	1	2
Laundrymen	1	..	..	..	..	..	1
Others engaged in domestic service ..	30	..	..	1	9	9	11
Total domestic	120	..	..	2	38	48	32
CLASS III.—COMMERCIAL.							
Banking and finance	12	..	1	1	1	4	5
Insurance and valuation	15	..	..	..	1	5	9
Land and household property	9	..	..	..	2	2	5
Trade—							
Books, publications, and advertising ..	11	..	..	..	2	4	5
Paper and stationery	6	..	..	..	2	2	2
Furniture	1	..	..	..	..	..	1
Textile fabrics	35	..	..	5	10	13	7
Dress	1	..	..	..	..	..	1
Animal food	52	..	2	..	16	13	21
Vegetable food	8	..	..	..	2	4	2
Groceries, drinks, narcotics, and stimu- lants ..	12	..	1	2	3	3	3
Living animals	9	..	..	2	3	2	2

OCCUPATIONS OF DECEASED MALES—*Continued.*

Occupations.	Number of Deaths of Males.	Age-groups.					
		Under 15.	15 and under 20.	20 and under 25.	25 and under 45.	45 and under 65.	65 Years and upwards.
CLASS III.—COMMERCIAL—continued.							
Trade—continued—							
Wool and other animal matter ..	1	..	..	..	1	..	..
Hay, corn, &c.	3	..	..	..	..	1	2
Timber	3	..	..	..	1	1	1
Wood, coal, &c.	4	..	..	..	1	..	3
Ironmongery	15	..	..	1	4	2	8
Merchants, shopkeepers, &c. . .	71	..	2	1	14	19	35
Dealers and hawkers	13	..	..	1	2	3	7
Agents, brokers, &c.	18	..	..	..	2	9	7
Accountants, clerks, &c.	90	..	3	5	29	29	24
Commercial travellers, salesmen ..	23	..	..	..	5	12	6
Other mercantile persons	16	..	..	..	1	7	8
Total commercial	428	..	9	18	102	135	164
CLASS IV.—TRANSPORT AND COMMUNICATION.							
Railway traffic	41	..	..	3	14	15	9
Tramway	3	..	..	..	2	1	..
Road	76	..	3	4	25	23	21
Sea and river traffic	122	..	..	6	36	34	46
Postal service	5	..	1	..	..	1	3
Telegraph and telephone service ..	3	..	..	1	..	2	..
Delivery of parcels, &c., by hand ..	3	..	..	..	1	2	..
Total transport and communication ..	253	..	4	14	78	78	79
CLASS V.—INDUSTRIAL.							
Books and publications	30	..	1	2	11	6	10
Musical instruments	3	..	..	..	2	1	..
Prints, pictures, and art materials ..	1	..	..	1	..	..	..
Ornaments, minor art products, &c. ..	5	..	..	1	1	1	2
Designs, medals, type, and dies	3	..	..	..	1	1	1
Watches, clocks, and scientific instruments	6	..	..	..	1	2	3
Engines, machines, tools, &c.	13	..	..	1	5	2	5
Carriages and vehicles	18	..	..	1	4	4	9
Harness, saddlery, and leatherware ..	9	..	..	1	2	5	1
Ships, boats, and equipments	23	..	..	..	2	8	13
Furniture	18	..	1	1	4	6	6
Building-material (wood)	26	..	2	2	9	7	6
Textile fabrics	5	..	..	..	..	2	3
Dress	88	..	1	1	13	23	50
Fibrous materials	7	..	..	1	4	..	2
Animal food	7	..	..	2	2	3	..
Vegetable food	46	..	1	2	14	8	21
Groceries, drinks, narcotics, and stimulants	11	..	1	..	2	4	4
Wool-scouring, soap, and candles ..	5	..	..	..	2	1	2
Paper manufacture	1	..	..	..	1	..	..

OCCUPATIONS OF DECEASED MALES—*Continued.*

Occupations.	Number of Deaths of Males.	Age-groups.					
		Under 15.	15 and under 20.	20 and under 25.	25 and under 45.	45 and under 65.	65 Years and upwards.
CLASS V.—INDUSTRIAL— <i>continued.</i>							
Marble, clay, cement, glass, &c. ..	9	..	..	1	1	1	6
Precious metals	10	..	..	1	4	4	1
Metals, other	58	..	..	4	10	18	26
Fuel, light, &c.	7	..	1	..	3	1	2
Building and construction—							
Builders and contractors	37	..	..	1	2	12	22
Stonemasons	10	..	..	..	..	1	9
Bricklayers	17	..	1	..	3	8	5
Carpenters	145	..	4	7	20	37	77
Plasterers	10	..	..	1	3	1	5
Painters and glaziers	36	..	3	1	4	17	11
Plumbers	21	..	1	3	7	7	3
Roads, railways, and earthworks ..	20	..	..	..	7	8	5
Disposal of the dead	2	..	..	..	..	1	1
Disposal of refuse	1	..	..	..	..	..	1
Other industrial workers—							
Mechanics, manufacturers	7	..	..	..	2	2	3
Machinists, machine hands	4	..	..	..	1	2	1
Contractors, managers, &c.	49	..	3	..	6	17	23
Engineers, engine-drivers	65	..	3	4	19	18	21
Millers, mill hands, &c.	6	..	..	..	..	2	4
Labourers undefined	630	..	15	35	141	154	285
Total industrial	1,469	..	38	74	313	395	649
CLASS VI.—AGRICULTURAL, PASTORAL, AND MINING PURSUITS, ETC.							
Agricultural	889	..	10	26	109	227	517
Pastoral	77	..	3	3	11	23	37
Bees, fisheries, and wild animals ..	18	..	..	..	4	5	9
Forestry	25	..	2	2	16	3	2
Kauri-gum diggers	35	..	..	..	4	8	23
Mines and quarries	283	..	3	5	41	47	187
Total agricultural, pastoral, &c. ..	1,327	..	18	36	185	313	775
CLASS VII.—INDEFINITE.							
Independent means, &c.	102	..	..	..	1	16	85
Dependent relatives (including persons under 20 years of age with no specified occupation)	1,456	1,430	26	..	..	..	..
Dependent upon the State or upon public or private support	32	..	..	..	1	1	30
Undefined or unknown	222	..	..	12	45	39	126
Total indefinite	1,812	1,430	26	12	47	56	241
Total deaths (all occupations) ..	5,604	1,430	100	162	808	1,078	2,026

DEATHS AND DEATH-RATES OF THE FOUR PRINCIPAL CITIES AND THEIR SUBURBS.

In the earlier annual reports on the vital statistics of the four chief towns the central boroughs alone were dealt with, particulars respecting the suburbs not having been obtained. But this omission was held to be a grave defect, as the suburban death-rate may differ much from the death-rate at the centre. Steps were therefore taken early in 1895 to collect statistics of the suburban boroughs as well as of the four chief cities. As regards Auckland and Christchurch, the whole of the area usually recognized as suburban has not yet been brought under municipal government, and the statistics given below do not deal with such portions as still remain in road districts. The omission, however, is not very important, for there are in either case quite enough suburbs included within borough boundaries to give a fair idea of the death-rate of greater Auckland and greater Christchurch. As further boroughs are formed the vital statistics will be made to include them.

The total number of deaths registered for the four centres in 1910 was 2,791—viz., 2,284 in the cities, and 507 in the suburbs.

By including the suburbs the death-rate for last year is lowered at all of the four centres. The rates for the year are:—

					Death-rates per 1,000 of Mean Population.
Auckland City	..	..	..	..	11·88
"	and seven suburban boroughs	..		..	9·73
Wellington City	..	..	..	..	9·31
"	and three suburban boroughs	..		..	8·95
Christchurch City	..	..	..	..	10·54
"	and three suburban boroughs	..		..	10·41
Dunedin City	..	..	..	..	10·99
"	and five suburban boroughs	..		..	10·24

The death-rates for the cities, including suburban boroughs, for five years are as below:—

		Deaths per 1,000 of Population.				
		1906.	1907.	1908.	1909.	1910.
Auckland (including suburbs)	..	9·90	11·43	10·41	9·30	9·73
Wellington	..	9·19	11·28	9·10	9·11	8·95
Christchurch	..	11·25	14·37	9·52	9·33	10·41
Dunedin	..	11·35	12·02	10·50	9·95	10·24

If the number of deaths of infants under one year be excluded, the mortality among the rest of the population is found to have been for 1909 and 1910 in the following ratio to the 1,000 living:—

			1909.	1910.
Auckland (including suburbs)	..	..	7·60	7·67
Wellington	"	..	6·89	6·91
Christchurch	"	..	7·60	8·62
Dunedin	"	..	8·67	8·24

The degree of infantile mortality is perhaps best shown in the proportion of deaths of children under one year of age to every 100 births. For 1909 and 1910 the proportions at the chief centres are,—

			1909.	1910.
Auckland (including suburbs)	..	..	6.18	7.90
Wellington	"	..	8.42	8.45
Christchurch	"	..	6.28	6.94
Dunedin	"	..	4.86	7.91

Again, the percentage of deaths of children under 5 to the total number of deaths is—in Auckland, 27.40; in Wellington, 27.02; in Christchurch, 20.66; in Dunedin, 22.61.

MORTALITY AT FOUR CENTRES, EXCLUDING SUBURBS.

Excluding suburbs, and dealing with the deaths at all ages in the four cities or central boroughs only, the rates for 1910 are found to be higher in Auckland and Christchurch, and lower in Wellington and Dunedin, than in the previous year. The figures for five years are given :—

		Deaths per 1,000 of Population.				
		1906.	1907.	1908.	1909.	1910.
Auckland (excluding suburbs)	..	12.51	13.38	12.43	11.25	11.88
Wellington	"	9.45	11.45	9.18	9.35	9.31
Christchurch	"	11.12	14.72	9.70	9.48	10.54
Dunedin	"	12.70	12.98	11.93	11.55	10.99

Omitting the deaths of infants under one year, and calculating the rate on the population of one year of age and upwards, an increase is shown at each of the four centres, except Dunedin. The mean rates for five years are also given :—

		Deaths per 1,000 of Population, excluding Infants under One Year of Age.		
		1909.	1910.	Mean of Five Years.
Auckland (excluding suburbs)	..	9.30	9.49	9.86
Wellington	"	7.29	7.34	7.57
Christchurch	"	7.95	8.89	9.08
Dunedin	"	10.40	9.20	10.21

Subjoined is a table showing the rates of infant mortality in the four cities for each of the past two years, together with the mean rates for the last five years.

		Deaths of Children under One Year to every 100 Births.		
		1909.	1910.	Mean of Five Years.
Auckland (excluding suburbs)	..	7.51	9.57	9.23
Wellington	"	8.48	8.89	8.91
Christchurch	"	6.17	6.97	7.96
Dunedin	"	5.10	7.51	7.65

VITAL STATISTICS OF AUSTRALASIAN CAPITALS, 1909.

The vital statistics of the two chief cities, *with their suburbs*, of Australasia show that the death-rate in Wellington (N.Z.) for 1909 was lower than that of either of those principal towns for the same year.

Capital Cities (including Suburbs).	Estimated Mean Population.	Births.		Deaths.		Excess of Births over Deaths
		Total Number.	Rate per 1,000 of Population.	Total Number.	Rate per 1,000 of Population.	
Melbourne ..	555,750	13,418	24.14	6,928	12.47	6,490
Sydney ..	599,000	15,461	25.81	6,149	10.27	9,312
Wellington ..	75,043	1,983	26.42	684	9.11	1,299

ORPHANHOOD OF CHILDREN.

Although this subject is not one of general interest, it may be desirable to summarize two of the tables published in the "Statistics of New Zealand."

The first table shows, for the five years 1906-10, the total number of men who died at each year of age from twenty upwards; the number of married men stated in the registers as having died (a) childless, (b) leaving children; and the number and ages of the children living at the time of the father's death.

NEW ZEALAND, 1906-10.

Ages of Married Men at Death.	Number of Married Men who died		Number and Ages of Living Issue.						
	Childless.	Leaving Children.	Under 5.	5 to 10.	10 to 15.	15 to 20.	21 and over.	Not specified.	Totals.
20 to 30 ..	116	167	234	38	..	..	..	14	286
30 " 40 ..	215	773	843	766	324	53	..	93	2,079
40 " 50 ..	214	1,039	597	953	1,038	977	312	261	4,138
50 " 60 ..	224	1,532	247	620	1,086	1,929	3,488	357	7,727
60 " 65 ..	131	997	51	126	316	842	4,059	219	5,613
65 and upwards	864	5,599	46	156	426	1,375	27,352	969	30,324

The number and ages of the youngest orphan children left by married men who died during the five years 1906-10 is stated below.

NUMBER AND AGES OF YOUNGEST LIVING CHILDREN LEFT BY MARRIED MEN WHO DIED, 1906-10.

Ages of Married Men at Death.	Number of Married Men who died leaving Children.	Number and Ages of Youngest Living Children.					
		Under 5.	5 to 10.	10 to 15.	15 to 20.	21 and over.	Not specified.
20 to 30 ..	167	154	5	..	..	..	8
30 " 40 ..	773	537	162	39	3	..	32
40 " 50 ..	1,039	389	277	183	103	23	64
50 " 60 ..	1,532	189	285	335	388	254	81
60 " 65 ..	997	35	67	138	291	429	37
65 and upwards	5,599	34	92	213	596	4,436	188

INFANTILE MORTALITY.

Subjoined is a classified statement of the deaths of infants under one year during 1910, with the ratio of the deaths in each class to the 1,000 births during the year:—

Year.	Sex.	Under 1 Month.	1 and under 3 Months.	3 and under 6 Months.	6 and under 12 Months.	Total under 12 Months
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NUMBER OF DEATHS.

1910	..	{ Male ..	..	459	177	165	191	992
		{ Female ..	..	327	121	168	152	768

DEATHS TO THE 1,000 BIRTHS.

1910	..	{ Male ..	..	34.15	13.17	12.27	14.21	73.80
		{ Female ..	..	26.07	9.65	13.39	12.12	61.23

Seventy-three out of every thousand of male children born, and sixty-one of every thousand females, are found to have died before attaining the age of one year. The mortality was thus one in fourteen of male children and one in sixteen of females in New Zealand.

It will also be seen from the figures that the chances of living during the first year of age are greater for female than for male infants. Thus, during the year 1910 there were—

100 deaths of males to 76 deaths of females	under 1 month of age;
100 " 73 "	from 1 to 3 months of age;
100 " 109 "	from 3 to 6 months of age;
100 " 85 "	from 6 to 12 months of age;
100 " 83 "	under 12 months of age.

Dealing with the results for ten years, the deaths of infants under one year are in the large proportion of three-fourths of the total deaths under five, as might be expected, the first year being the tenderest period. (See notes to tables.)

DEATHS OF INFANTS UNDER ONE YEAR, AND PROPORTION TO BIRTHS.

Year.			Deaths of infants under 1 Year of Age. (Totals for each Year, and Means of 10 Years.)					Total Births registered in each Year, and Mean of 10 Years.	Proportion of Deaths of Infants under 1 Year to every 1,000 Births.
			Under 1 Month.	1 Month and under 3 Months.	3 Months and under 6 Months.	6 Months and under 12 Months.	Total under 12 Months.		
1901	..	..	610	272	292	289	1,463	20,491	71.4
1902	..	..	665	344	313	390	1,712	20,655	82.9
1903	..	..	692	346	367	365	1,770	21,829	81.1
1904	..	..	669	260	356	331	1,616	22,766	71.0
1905	..	..	714	285	290	310	1,599	23,682	67.5
1906	..	..	717	247	244	298	1,506	24,252	62.1
1907	..	..	763	446	500	519	2,228	25,094	88.8
1908	..	..	810	242	347	362	1,761	25,940	67.9
1909	..	..	794	285	258	297	1,634	26,524	61.6
1910	..	..	786	298	333	343	1,760	25,984	67.7
Means for ten years ..			722	302	330	350	1,705	23,722	71.9

NOTE.—The total number of deaths of infants for the period included in the table is 17,049.

DEATHS OF CHILDREN UNDER FIVE YEARS AND PROPORTION TO DEATHS AT ALL AGES,

Year.		Deaths of Children under 5 Years of Age. (Totals for each Year, and Means of 10 Years.)						Total Deaths at all Ages for each Year, and Mean of 10 Years.	Deaths under 5 Years: Per Cent. of Mor- tality at all Ages.
		Under 1 Year.	1 Year and under 2 Years.	2 Years and under 3 Years.	3 Years and under 4 Years.	4 Years and under 5 Years.	Total Deaths under 5 Years.		
1901 ..	..	1,463	208	85	68	52	1,876	7,634	24.57
1902 ..	..	1,712	307	118	92	61	2,290	8,375	27.34
1903 ..	..	1,770	275	126	111	64	2,346	8,528	27.51
1904 ..	..	1,616	169	83	63	43	1,974	8,087	24.41
1905 ..	..	1,599	176	97	61	46	1,979	8,061	24.55
1906 ..	..	1,506	177	87	58	37	1,865	8,339	22.36
1907 ..	..	2,228	350	165	94	49	2,886	10,066	28.67
1908 ..	..	1,761	231	103	88	45	2,228	9,043	24.64
1909 ..	..	1,634	242	115	75	44	2,110	8,959	23.55
1910 ..	..	1,760	253	95	76	54	2,238	9,639	23.22
Means for ten years)		1,704	239	107	79	50	2,179	8,673	25.12

NOTE.—The total number of deaths included in this table of children under 5 years is 21,792.

Although 17,049 infants (under one year) were lost to the Dominion by death during the decade, and, including these, 21,792 children under five, the third table shows more satisfactory results for New Zealand than for New South Wales or Victoria in the matter of the preservation of infant life. Dealing with averages of five years, in New Zealand only 69.6 infants under one year are found to die out of every 1,000 born, against 74.5 in New South Wales and 81.2 in Victoria.

				Proportion of Deaths of Infants under 1 Year of Age to every 1,000 Births.		
Year.				New Zealand.	New South Wales.	Victoria.
1905	..	..	..	67.5	80.6	83.3
1906	..	..	..	62.1	74.5	92.9
1907	..	..	..	88.8	88.5	72.6
1908	..	..	..	67.9	75.2	86.1
1909	..	..	..	61.6	73.8	71.3
Means for five years	..	..	..	69.6	74.5	81.2

The following table shows the infant mortality in Wellington, Sydney, and Melbourne.

		Wellington and Suburbs.			Sydney and Suburbs.			Melbourne and Suburbs.		
Year.		Total Births.	Deaths of Infants under 1 Year.	Proportion of Deaths of Infants under 1 Year to 1,000 Births.	Total Births.	Deaths of Infants under 1 Year.	Proportion of Deaths of Infants under 1 Year to 1,000 Births.	Total Births.	Deaths of Infants under 1 Year.	Proportion of Deaths of Infants under 1 Year to 1,000 Births.
1905	..	1,715	165	96.20	13,769	1,230	89.30	11,944	1,133	94.80
1906	..	1,753	126	71.88	13,984	1,176	84.10	12,373	1,404	113.47
1907	..	1,893	223	117.80	14,334	1,380	96.27	12,860	1,102	85.69
1908	..	2,008	164	81.67	14,861	1,229	82.70	13,015	1,280	98.35
1909	..	1,983	167	84.22	15,461	1,261	81.56	13,418	1,126	83.92
Means for five years		1,870	169	90.37	14,482	1,255	86.66	12,722	1,209	95.03

The infantile mortality in 1909 for a number of countries is given by the Registrar-General of England.

DEATHS OF CHILDREN UNDER ONE YEAR TO 1,000 BIRTHS.

Country.	Deaths per 1,000 Births.	Country.	Deaths per 1,000 Births
Chili (1908)	320	Scotland (1908) ..	121
Hungary	212	Denmark (1908) ..	123
Ceylon	202	Ireland	92
Jamaica	174	Victoria	71
Prussia	164	Western Australia ..	78
Servia (1908)	158	Sweden (1908) ..	85
Italy (1908)	153	New South Wales ..	74
Japan (1908)	157	Tasmania	65
Belgium (1908)	147	Queensland	72
Netherlands	99	South Australia ..	61
Switzerland (1908) ..	108	New Zealand	62
England and Wales ..	109	Norway (1908) ..	76
Finland	111		

Here, of European countries, Prussia, which has a birth-rate of 31·8 per 1,000 of population, shows an infantile mortality of 164 per 1,000 births; while New Zealand, with a birth-rate of 27 per 1,000 of population, loses only 62 infants per 1,000 births. So that, whatever may be the faults of ignorance or wilfulness in this country, from a statistical point of view it would appear that far better conditions obtain than elsewhere.

The principal causes of mortality in children under one year for New Zealand are given, with the numbers of deaths for five years from such causes. Premature birth stands first in order of importance, diarrhœa and enteritis next, followed by marasmus or debility. Here it is seen how much mortality is attributed to these causes according to the medical certificates.

DEATHS OF CHILDREN UNDER ONE YEAR.—CAUSES, 1906–10.

Causes.	Number of Deaths from each Cause.					Percentage of Total.				
	1906.	1907.	1908.	1909.	1910.	1906.	1907.	1908.	1909.	1910.
Whooping-cough	17	207	31	28	101	1·13	9·29	1·76	1·71	5·74
Convulsions ..	90	84	76	107	80	5·98	3·77	4·32	6·55	4·54
Bronchitis and pneumonia	170	269	148	168	157	11·29	12·08	8·40	10·28	8·92
Diarrhœa and enteritis	232	557	418	249	343	15·40	25·00	23·74	15·24	19·49
Premature birth	337	359	388	347	407	22·38	16·11	22·03	21·24	23·12
Marasmus, &c. ..	267	303	264	256	281	17·73	13·60	14·99	15·67	15·97
Other causes ..	393	449	436	479	391	26·09	20·15	24·76	29·31	22·22
Totals ..	1,506	2,228	1,761	1,634	1,760	100·00	100·00	100·00	100·00	100·00

INFANT-LIFE PROTECTION.

It is unlawful for any person to take charge of an infant under the age of six years, for the purpose of nursing or maintaining it apart from its parents or guardians, for a longer period than seven consecutive days, unless such person is licensed as a foster-parent.

Provision is made by law for the granting and revocation of licenses, and for the method of payment of maintenance-money. No payment is to be made to or received by a foster-parent except in pursuance of an agreement approved by the Secretary to the Education Department, and if default be made in payment under the agreement the amount due, or part thereof, may be paid by the Secretary, and shall be recoverable as a debt due to the Crown. When and so long as any money so recoverable remains unpaid, the Secretary shall have and may exercise the powers of a guardian until the child attains the age of fifteen years. Provision is also made for the inspection of foster-homes, and in case of the removal or death of foster-children. The Act applies to any adopted infant in the same manner and to the same extent as if no such adoption had taken place. The Department of Education is the authority by whom the Act is to be administered.

In a recent report the Registrar-General of England remarked "that a well-devised system of early notification of births, legalized and worked in conjunction with the present registration system on the one hand, and with sanitary administration on the other, might, along with other motive forces, serve as a most effective and lasting barrier with which to stem the tide of infant mortality." The Notification of Births Act was passed accordingly in England, and the New Zealand Legislature in 1907 introduced provisions for early notification allowing seventy-two hours after birth if in a city or borough, or twenty-one days in any other case.

CAUSES OF DEATH.

The classification of causes of death was made in 1908 for the first time in New Zealand according to the Bertillon Index of Diseases. This system has been adopted by the Commonwealth of Australia and the principal European and American countries. It is highly desirable for comparative purposes that uniformity of statistical method should obtain when possible.

The new system differs materially from that hitherto in use, and comparisons of certain causes of mortality prior to 1908 are im-

possible owing to changes in the classification of minor diseases. This applies more particularly to diseases of the digestive, nervous, respiratory, and circulatory systems. There are, however, certain principal causes of deaths which are unaffected and retain their comparative value, such as cancer, tubercular diseases, typhoid fever, whooping-cough, measles, influenza, scarlet fever, diabetes, appendicitis, liver and puerperal diseases, suicide, and old age.

A comparison of the causes of deaths in 1909 and 1910 arranged according to an abridged classification, the percentage of each group to the total deaths, and the proportion per 10,000 persons living, is given in the following table:—

Class.	Number of Deaths.		Proportion to Total Deaths.		Proportion per 10,000 living.	
	1909.	1910.	1909.	1910.	1909.	1910.
	Total.	Total.	Per Cent.	Per Cent.		
I. General diseases	2,187	2,393	24.41	24.83	22.50	24.10
II. Diseases of the nervous system and of the organs of special sense	920	1,008	10.27	10.46	9.47	10.15
III. Diseases of the circulatory system	1,369	1,412	15.28	14.65	14.09	14.22
IV. Diseases of the respiratory system	784	911	8.75	9.45	8.07	9.18
V. Diseases of the digestive system	843	1,026	9.41	10.64	8.67	10.34
VI. Diseases of the genito-urinary system and adnexa	407	436	4.54	4.52	4.19	4.39
VII. Puerperal condition ..	135	117	1.51	1.21	1.39	1.18
VIII. Diseases of the skin and of the cellular tissue	50	33	0.56	0.34	0.51	0.33
IX. Diseases of the organs of locomotion	25	18	0.28	0.19	0.26	0.18
X. Malformations	64	65	0.71	0.67	0.66	0.65
XI. Infancy	676	719	7.55	7.46	6.96	7.24
XII. Old-age	556	660	6.21	6.85	5.72	6.66
XIII. Violence	778	667	8.68	6.92	8.00	6.72
XIV. Ill-defined causes..	165	174	1.84	1.81	1.70	1.75
Totals	8,959	9,639	100.00	100.00	92.19	97.09

The next table shows the number of deaths from each principal cause for the five years 1906-10, and the proportion per 10,000 of the population.

Cause.	Number of Deaths.					Proportion per 10,000 of Mean Population.				
	1906.	1907.	1908.	1909.	1910.	1906.	1907.	1908.	1909.	1910.
Typhoid fever	48	53	90	55	62	0.54	0.58	0.95	0.57	0.62
Measles	12	101	19	26	1	0.13	1.10	0.20	0.27	0.01
Scarlet fever..	18	25	60	26	13	0.20	0.27	0.63	0.27	0.13
Whooping-cough	26	307	42	41	148	0.29	3.34	0.44	0.42	1.42
Influenza ..	132	223	64	47	141	1.47	2.43	0.68	0.48	1.42
Tuberculosis of the lungs	556	612	607	538	550	6.21	6.66	6.42	6.05	5.54
Other forms of tuberculosis	164	244	232	212	131	1.83	2.65	2.45	2.18	1.82
Cancer	623	674	657	711	742	6.96	7.33	6.95	7.32	7.47
Diabetes	104	87	100	104	123	1.16	0.95	1.06	1.07	1.24
Simple meningitis	138	130	136	131	142	1.54	1.41	1.44	1.35	1.43
Convulsions of children under 5 years of age	106	104	96	131	107	1.18	1.13	1.02	1.35	1.08
Apoplexy	272	330	341	316	389	3.04	3.59	3.61	3.25	3.92
Pneumonia ..	444	572	453	458	448	4.96	6.22	4.80	4.71	4.51
Gastritis and enteritis	335	518	478	362	457	3.74	5.64	5.06	3.73	4.60
Diarrhoeal diseases	97	314	198	102	164	1.08	3.42	2.20	1.05	1.65
Cirrhosis of liver	44	42	52	47	38	0.49	0.46	0.55	0.48	0.38
Appendicitis..	69	86	81	66	98	0.77	0.93	0.86	0.68	0.99
Bright's disease and acute nephritis	241	268	263	261	256	2.69	2.92	2.78	2.69	2.58
Violence, suicide	83	102	103	118	100	0.93	1.11	1.09	1.21	1.01
" accident	575	611	570	660	567	6.42	6.65	6.03	6.79	5.71
Other causes	4,252	4,663	4,401	4,497	4,912	..	..	..	..	..
Totals	8,339	10,066	9,043	8,959	9,639	93.11	109.52	95.69	92.19	97.09

For purposes of comparison with previous years it is necessary to confine attention to certain special causes of death. Diseases of the circulatory system, though numerous, are avoided, owing to the fact that in former years it has been the practice, when the cause of death was certified as heart disease with another possibly fatal complaint the latter has been preferred. Under the new system the reverse is the case. The number of deaths occurring from bronchitis is similarly affected. Hydatids, formerly grouped under the heading "Parasitic," are now assigned to the location of the disease. These and many other changes in the classification must be borne in mind when comparisons with former years are sought.

Typhoid Fever.—Deaths from this cause numbered 62 in 1910, against 55 in the previous year, the average for five years being 61.

Measles.—There was an outbreak of this complaint in 1907, causing 101 deaths. In 1909 only 26 deaths were recorded, and only one death in 1910.

Scarlet Fever.—The number of deaths from scarlet fever in 1910 was 13. The average annual mortality for the five years 1906–10 was 28.

Whooping-cough.—There were 148 deaths in 1910, 41 in 1909, 42 in 1908, 307 in 1907, and 26 in 1906.

Influenza.—This was more prevalent in 1910 than in 1909, 141 deaths being recorded.

Tuberculosis.—Deaths from phthisis numbered 550 or 5.54 per 10,000 of the population, against 588 deaths or 6.05 per 10,000 in 1909, and 607 deaths or 6.42 per 10,000 in 1908. The average for the past ten years was 579, or 6.6 per 10,000.

Year.						Deaths from Phthisis.	Rate per 10,000.
1901	..	..	..	..	..	596	7.66
1902	..	..	..	..	..	617	7.73
1903	..	..	..	..	..	570	6.95
1904	..	..	..	..	..	598	7.08
1905	..	..	..	..	..	496	5.70
1906	..	..	..	..	..	556	6.21
1907	..	..	..	..	..	612	6.66
1908	..	..	..	..	..	607	6.42
1909	..	..	..	..	..	588	6.05
1910	..	..	..	..	..	550	5.54

Reference to the following table will show that 325 persons known to have been born in the Dominion died during 1910 from phthisis, a proportion of 4.80 per 10,000 of the estimated native-

born white population, and 147 persons resident for fifteen years or over succumbed to the disease.

DEATHS FROM PHTHISIS, 1909.

Length of Residence in the Dominion.			Age at Death.										Total.
			Under 5 Years.	5 to 10.	10 to 15.	15 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 to 75.	75 and up- wards.	
MALES.													
Under 1 month	...	...	...	...	...	...	...	...	...	...	...	...	...
1 to 6 months	...	...	...	...	...	...	...	...	...	...	...	...	...
6 to 12 months	...	...	...	...	...	1	1	1	...	...	...	...	3
1 to 2 years	...	...	...	...	...	1	3	1	...	...	...	...	8
2 to 3 years	...	...	...	...	...	1	3	1	...	...	...	1	6
3 to 4 years	...	...	...	...	...	...	5	1	2	...	...	...	8
4 to 5 years	...	...	...	...	...	...	3	...	...	...	...	...	3
5 to 10 years	...	...	...	...	...	...	8	4	2	...	...	...	14
10 to 15 years	...	...	...	...	...	...	5	4	4	1	...	...	14
15 to 20 years	...	...	...	...	...	...	1	1	4	2	...	...	8
20 to 25 years	...	...	...	...	...	...	1	2	2	...	...	...	5
25 years and upwards	...	...	...	...	...	...	4	4	15	21	9	6	59
Not known	...	...	...	...	...	...	9	6	9	3	4	...	31
Born in Dominion	...	...	2	3	4	39	67	33	10	4	1	...	153
Totals	...	...	2	3	4	41	110	50	50	31	14	7	312
FEMALES.													
Under 1 month	...	...	...	...	...	...	1	...	...	...	...	...	1
1 to 6 months	...	...	...	...	...	...	...	...	...	...	...	...	...
6 to 12 months	...	...	...	...	...	1	1	...	...	...	...	...	2
1 to 2 years	...	...	...	...	...	1	2	1	...	...	...	...	4
2 to 3 years	...	...	...	...	...	1	3	...	...	...	...	...	4
3 to 4 years	...	...	...	...	...	...	...	2	1	...	...	...	3
4 to 5 years	...	...	...	...	...	...	2	1	...	...	...	...	3
5 to 10 years	...	...	...	...	...	2	2	...	...	...	...	...	4
10 to 15 years	...	...	...	...	...	1	...	...	...	...	...	...	1
15 to 20 years	...	...	...	...	...	...	1	1	1	...	...	...	3
20 to 25 years	...	...	...	...	...	1	1	1	1	...	...	...	4
25 years and upwards	...	...	...	...	...	...	3	5	6	8	8	...	30
Not known	...	...	...	...	...	1	...	4	1	...	1	...	7
Born in Dominion	...	...	1	...	1	57	85	18	7	2	1	...	172
Totals	...	...	1	...	1	65	100	34	17	10	10	...	238
Totals of both sexes	...	...	3	3	5	106	210	84	67	41	24	7	550

Phthisis is now known to be and is treated as an infectious preventable disease caused by the *Bacillus tuberculosis*, which is communicable in many ways. Certain constitutions are far more predisposed than others to receive this bacillus, especially under conditions of life unfavourable to robust health, when a nidus is formed for the development of the bacillus. The Government has established a sanatorium for consumptives at Cambridge, in the Waikato, and further institutions are contemplated. There are sanatoria for the treatment of this disease in connection with some of the public hospitals.

The mortality from all forms of tuberculosis for the past ten years has ranged from 7.36 to 10.05 per 10,000 of the population, and the percentage of total deaths from all causes has fluctuated during the same period between 7.58 and 10.15.

DEATHS AND DEATH-RATES FROM TUBERCULOSIS AND PERCENTAGE OF TOTAL DEATHS, 1901-10.

Year.		Mean Population.	Number of Deaths from Tubercular Diseases.	Rate per 10,000.	Percentage of Total Deaths from all Causes.
1901	.. ..	777,968	775	9.96	10.15
1902	.. ..	797,793	802	10.05	9.58
1903	.. ..	820,217	769	9.38	9.02
1904	.. ..	845,022	799	9.46	9.88
1905	.. ..	870,000	678	7.79	8.41
1906	.. ..	895,594	720	8.04	8.63
1907	.. ..	919,105	856	9.31	8.50
1908	.. ..	945,063	839	8.87	9.28
1909	.. ..	971,784	800	8.23	8.93
1910	.. ..	992,802	731	7.36	7.58

AGES OF PERSONS WHO DIED FROM TUBERCULAR DISEASES, 1910.

Ages.	Male.	Female	Total.	Ages.	Male.	Female	Total.
Under 5 years	35	30	65	50 years and under 55	29	9	38
5 years and under 10	12	12	24	55	60	23	6
10	15	5	4	60	65	10	5
15	20	10	28	65	70	6	7
20	25	43	53	70	75	8	5
25	30	66	76	75	80	5	..
30	35	57	57	80 upwards	..	2	..
35	40	27	32				
40	45	32	8				
45	50	27	11				
			38	Total deaths	397	334	731

In comparison with England and Wales and the States of the Australian Commonwealth the deaths from tuberculosis per 1,000 of the population was lower in Queensland and New South Wales than in New Zealand.

DEATH-RATES FROM TUBERCULOSIS AND PERCENTAGE OF TOTAL DEATHS, 1909.

	Death-rates (per 1,000) from Tuberculosis.	Percentage of Total Deaths.
England and Wales	1.52	10.50
New South Wales	0.77	7.86
Victoria	1.02	9.09
Queensland	0.67	6.91
South Australia	0.96	10.26
Western Australia	0.85	8.58
Tasmania	0.85	8.58
New Zealand	0.82	8.93

Cancer.—There were 742 deaths assigned to this cause in 1910, a proportion of 7.47 per 10,000 persons, the average number and rate for the five years 1906-10 being 681 and 7.21 respectively. Deaths of males numbered 399 and of females 343. The death-rate from cancer is not so great as that from tubercular diseases, but its increasing tendency is a matter of grave concern.

NUMBER OF PERSONS WHO DIED FROM CANCER, THE PROPORTION PER 10,000 PERSONS LIVING, AND THE PERCENTAGE OF ALL DEATHS.

Year.	Deaths from Cancer.	Total Deaths, all Causes.	Deaths from Cancer per 10,000 of Living Persons.	Percentage of Total Deaths due to Cancer.
1901	515	7,634	6.62	6.75
1902	536	8,375	6.72	6.40
1903	582	8,528	7.10	6.82
1904	571	8,087	6.76	7.06
1905	566	8,061	6.51	7.02
1906	623	8,339	6.96	7.47
1907	674	10,066	7.33	6.70
1908	657	9,043	6.95	7.27
1909	711	8,959	7.32	7.94
1910	742	9,639	7.47	7.70

The part of the body mostly affected among males is the stomach, and among females the generative and mammary organs.

CANCER: SEAT OF DISEASE.

Seat of Disease.	Males.	Females.	Total.
Mouth, lip, tongue, throat, neck	93	17	110
Stomach	98	63	161
Intestines, rectum	72	65	137
Kidneys, bladder, urethra, &c.	24	11	35
Liver	53	36	89
Female genital organs	..	71	71
Breast	..	40	40
Other organs	59	40	99
Totals	399	343	742

Ninety-five per cent. of the deaths were at the ages 35 years and upwards, and 57 per cent. at the ages 60 years and upwards.

AGES OF PERSONS WHO DIED FROM CANCER, 1910.

Ages.	Males.	Females.	Total.	Ages	Males.	Females.	Total.
Under 5 years ..	4	5	9	45 years and under 50	20	28	48
5 years and under 10 ..	..	..	..	50 ..	55	28	39
10 ..	15	1	1	55 ..	60	45	87
15 ..	20	..	..	60 ..	65	64	113
20 ..	25	1	2	65 ..	70	62	103
25 ..	30	1	1	70 ..	75	36	113
30 ..	35	5	10	75 ..	80	37	82
35 ..	40	9	18	80 years and upwards	29	20	49
40 ..	45	10	39				
				Totals ..	399	343	742

The proportion of deaths from cancer to the 1,000 persons living in some of the principal European countries as shown below leads to the conclusion that there is a general tendency to increase.

CANCER DEATH-RATES PER 1,000 LIVING IN SOME PRINCIPAL EUROPEAN COUNTRIES.

Country.	Average 1901-5.	Years.			
		1906.	1907.	1908.	1909.
Switzerland ..	1.10	1.12	1.06	1.11	..
The Netherlands ..	0.85	0.88	0.89	0.90	0.90
England and Wales ..	0.86	0.92	0.91	0.92	0.95
Scotland ..	0.83	0.94	0.94	0.94	..
Austria ..	0.69	0.73	0.72	0.72	..
Victoria ..	0.76	0.77	0.82	0.81	0.82
Ireland ..	0.56	0.64	0.62	0.62	0.65
New Zealand ..	0.67	0.70	0.73	0.70	0.73
South Australia ..	0.76	0.84	0.80	0.77	0.86
Prussia ..	0.64	0.69	0.72	0.73	0.74
New South Wales ..	0.80	0.85	0.87	0.84	0.90
Belgium ..	0.49	0.49	0.51	0.54	..
Queensland ..	0.79	0.76	0.90	0.71	0.83
Tasmania ..	0.68	0.63	0.77	0.82	0.82
Italy ..	0.45	0.51	0.50	0.53	0.53
Western Australia ..	0.74	0.98	0.83	0.86	1.09
Spain ..	0.38	0.41	0.41	0.44	0.44
Hungary ..	0.38	0.39	0.41	0.42	0.43

Diabetes.—There were 123 deaths in 1910, a rate of 1.24 per 10,000, the average for the last five years being 1.04 and 1.10 respectively.

Simple Meningitis.—This disease caused 142 deaths in 1910, the average of the past five years being 135.

Convulsions of Children.—It would appear that the mortality from this cause shows a decreasing tendency, although the rate, measured by the total population, was exceptionally high in 1909. The proportion of deaths per 10,000 children living under 5 years of age was 11.52 in 1905, 11.65 in 1909, and 9.32 in 1910.

Apoplexy.—The average number of deaths from this cause during the past five years was 329, and the rate per 10,000, 3.48. Last year the number of deaths was 389, and the rate 3.92 per 10,000.

Pneumonia.—There were 448 deaths in 1910, against 458 in 1909. Excepting occasional fluctuations due to exceptional climatic conditions, the rate per 10,000 remains fairly constant at about 4.9.

Gastritis and Enteritis and Diarrhœal Diseases.—Although shown separately in the table, it may be advisable to consider these causes together. The number of deaths recorded in 1910 was 621, a rate of 6.25 per 10,000, as compared with an average of 605 and 6.43 respectively for the past five years.

Cirrhosis of Liver.—There were 38 deaths in 1910, as compared with an average of 45 for the five years 1906–10.

Appendicitis.—There were 98 deaths ascribed to this cause in 1910, the average number for five years being 80.

Bright's Disease and Nephritis.—Of the 256 deaths last year 206 were certified as Bright's disease and 50 as acute nephritis. The rate per 10,000 living for 1910 was 2·58, against an average of 2·73 for the last five years.

Puerperal Diseases.—In 1910 the deaths certified to these causes numbered 117. Included in the number were: Accidents of pregnancy, 35; puerperal septicæmia, 35; other accidents of childbirth, 47. The number of deaths to every 1,000 confinements for each of ten years is shown.

Year.	Deaths of Mothers to every 1,000 Confinements.	Year.	Deaths of Mothers to every 1,000 Confinements.
1901	4·39	1906	3·91
1902	5·33	1907	4·62
1903	5·86	1908	4·64
1904	4·66	1909	5·14
1905	4·22	1910	4·55

Violence.—The deaths from external violence, apart from suicide, numbered 567 in 1910—males 466, females 101. The rate per 10,000 living was 6·42 in 1906, 6·65 in 1907, 6·03 in 1908, 6·79 in 1909, and 5·71 in 1910. The various forms of accidental deaths in 1910 are shown in the following table:—

ACCIDENTAL DEATHS, 1910.

Cause of Death.	Males.	Females.	Total.
Fractures	33	9	42
Shooting	14	1	15
Other accidental injuries	167	10	177
Burns, scalds	23	27	50
Insolation	2	..	2
Electric shock	1	1	2
Accidental drowning	135	25	160
Inhalation of noxious gases	10	4	14
Other accidental poisoning	12	5	17
Other external violence	69	19	88
Total deaths	466	101	567

Suicide.—The suicidal deaths in 1910 were 100—males 86 and females 14. The rate per 10,000 living was 1·01 in 1910, against an average of 1·07 for the past five years. The means most frequently resorted to by males was shooting, and by females, poison and drowning. The following table shows the means of self-destruction employed:—

SUICIDES, 1910.

Mode of Death.						Males.	Females.	Total.
Poison	..	..	..	..	..	12	2	14
Hanging or strangulation	..	..	..	..	..	22	4	26
Drowning	..	..	..	..	..	6	7	13
Firearms	..	..	..	..	..	26	..	26
Cutting-instruments	..	..	..	..	..	15	1	16
Other modes	..	..	..	..	..	5	..	5
Total suicides						86	14	100

VACCINATION.

The vaccinations registered for the ten years ending 1908 and for the year 1910 are shown hereunder. No accurate record of the operations in 1909 having been kept by the public health authorities.

Year.		Total Vaccinations registered of Children under 14 Years of Age.	Vaccinations of Children under 1 Year of Age.	Number of Births registered.	Proportion of Successful Vaccinations of Children under 1 Year of Age to Total Births. Per Cent.
1910	..	2,659	1,171	25,984	4·51
1908	..	3,346	1,249	25,940	4·82
1907	..	5,328	1,961	25,094	7·81
1906	..	3,602	1,810	24,252	7·46
1905	..	3,818	2,079	23,682	8·78
1904	..	18,368	2,323	22,766	10·20
1903	..	11,683	5,566	21,829	25·50
1902	..	8,763	2,611	20,655	12·64
1901	..	3,768	1,984	20,491	9·68
1900	..	4,525	3,151	19,546	16·12
1899	..	5,133	3,379	18,835	17·94

The number of successful vaccinations of children registered in 1910 was 2,659, against 3,346 in 1908. The fall prior to 1902 was consequent on the alteration of the law relating to vaccination in England, and subsequently in this Dominion, while the increase shown for the three years 1902-4 was no doubt due to a slight visitation of small-pox from abroad, which caused one death in 1903.

Five children out of every hundred born in 1910 are shown to have been successfully vaccinated in that year. The last three years show a position even lower than that which obtained in 1901 as regards vaccination of infants. The procedure under the new law as to vaccination is similar to that previously in force. The Registrar issues a notice when a birth is registered, with forms for certificate as to the result of vaccination attached. Vaccination is still compulsory, if exemption is not secured in four months from date of birth. But everything is now subject to the provisions of the "exemption clause," which is the main feature, and governs the rest. Any parent or custodian who has conscientious objections—believing that vaccination would

be injurious to the child's health—can apply for a certificate of exemption to a Magistrate or Registrar of Births; and, when the child's parent or guardian is resident outside of a borough, the application may be made to and certificate granted by a Justice of the Peace.

Twenty-eight thousand nine hundred and ninety-three exemption certificates were issued from the 13th October, 1900, to the end of the year 1910. Of these 6,090 belong to the year 1910, when, as before stated, the successful vaccination of children under one year of age amounted to 1,171, or 4·51 per cent. of births.

When no exemption certificate is obtained, the law now allows to the parent *twelve months* instead of *six* from date of birth in which to vaccinate, and a similar period from date of taking charge of child in case of a custodian. There are penalties for not vaccinating, as before. One conviction for neglecting to vaccinate a child removes liability until the child is four years of age.

The figures given above do not include Maoris vaccinated, nor vaccinations of adult persons other than Natives.

HOSPITALS AND CHARITABLE INSTITUTIONS.

Prior to the abolition of provinces the hospitals of the Dominion were supported mainly out of provincial revenues. After that event the expenditure for hospitals was for the most part charged against the revenue of counties and municipal corporations, until October, 1885, when the Hospitals and Charitable Institutions Act, 1885 (re-enacted in 1908), came into force.

Under this Act that portion of New Zealand included within the three principal islands—the North, South, and Stewart Islands—was divided into thirty-six hospital districts, each consisting of one or more counties with the interior boroughs and certain town districts having a population of five hundred or more, presided over by thirteen Hospital Boards, twenty-three combined Hospital and Charitable-aid Boards, and six Charitable-aid Boards.

The Hospitals and Charitable Institutions Act, 1909, is described in the preamble as “An Act to consolidate and amend the law relating to public hospitals and charitable institutions, the distribution of charitable aid, and the establishment of private hospitals.” All previous enactments relating to these matters are repealed.

The main provisions of the Act are thus briefly described: The distinction between Hospital Boards and Charitable-aid Boards has been abolished, and every Board now possesses the double function of maintaining hospitals and administering charitable relief. The Board consists of representatives of the various contributory local districts, counties, boroughs, town districts, and in some instances road districts, as the case may be, lying within the hospital district.

Representation on the Board is proportionate to the population and the value of the rateable property in the contributory district,

the total number of members of any Board not to be less than eight or more than twenty. The representatives are elected by the electors of the local authority of the contributory district, casual vacancies being filled by nomination by the local authority itself. Small contributory districts may be combined, and return a representative in common. The representatives of each contributory district retire at every general election of the local authority of that district, and their places are filled by an election held at the same time as that general election. This arrangement preserves the continuity of the Boards by securing the retirement of groups of members at different times, and also avoids the expense of a separate and special election. All property in connection with the purposes of the Act, including hospitals for infectious diseases, is vested in the Boards, excepting that belonging to certain hospitals, four in number, and six charitable institutions, which are specifically exempted on the ground that they are self-supporting so far as the local authorities are concerned.

The revenues of the Boards accrue from the following sources:—

1. Rents and profits of land and endowments.
2. Voluntary contributions and bequests.
3. Contribution from local authorities.
4. Subsidies from the Consolidated Fund as follows:—
 - (a.) Ten shillings in the pound on all devises or bequests, provided the subsidy shall not exceed £500 in respect of the estate of any single testator.
 - (b.) Twenty-four shillings in the pound on voluntary contributions other than bequests.
 - (c.) Pound for pound on contributions by local authorities in respect of capital expenditure, and in respect of other expenditure on a sliding scale, the amounts ranging from 12s. 3d. in the pound when the capital rateable value of property in the district exceeds £450 per head of the population, and the rate of levy per head is not under 4s., to 24s. 3d. when the value per head is less than £100 and the levy per head less than 2s.

The amount to be contributed by the local authorities is determined by estimating the expenditure for the ensuing year, including any deficiency brought forward, and deducting from the amount so ascertained the probable revenue from all sources excepting contributions from local authorities; the balance must be provided by the contributory bodies either out of their ordinary revenues or by special rates. Should any body fail to pay the required contribution, the amount due may be deducted from any subsidy or grant payable by the Government to the said local authority. The revenues of the Boards are thus secured absolutely.

When funds are required for the purpose of acquiring land as a site for any building, or for erecting, adding to, or altering any building, the contributory authority may raise the amount required

by way of loan from the Government Advances Board, repaying the loan by instalments.

Provision is made by which the contributory authorities may demand an inquiry if they consider the proposed expenditure is unnecessary or extravagant, and if such contention is upheld an amended estimate and fresh apportionment must be made.

The Inspector-General of Hospitals has the general administration of the Act under the direction of the Minister of Public Health, and is intrusted with authority to inspect institutions within the meaning of the Act at any time he may think fit. If a Board fails or refuses to perform any duty imposed by the Act, the Inspector-General may by direction of the Minister take the matter in hand and remedy it, charging the Board with any expense incurred in so doing.

The Dominion is divided into thirty-six hospital and charitable-aid districts, each of which is under the control of a Board elected as mentioned above. Besides the administration of hospitals and charitable aid, these Boards are the responsible authorities as regards certain public health matters, being especially responsible for the control of infectious diseases.

Information relating to the public hospitals in the Dominion for the year ended 31st March, 1911, compared with the previous corresponding period is given in the following table :—

		1909-10.	1910-11.	Increase.
Number of institutions ..	..	56	56	—
Stipendiary medical staff ..	..	80	82	2
Nursing staff—				
Trained nurses ..	..	210	233	23
Probationers ..	..	452	503	51
Domestic staff ..	..	437	437	—
Number of beds ..	..	2,689	2,859	170

The following shows the receipts and expenditure upon hospitals and charitable aid for the years ended the 31st March, 1910 and 1911 :—

<i>Receipts:</i>	Year ended 31st March,	
	1910.	1911.
	£	£
From Government ..	152,857	167,770
From local authorities ..	129,012	131,525
Voluntary contributions ..	31,060	35,433
Payments on account of persons relieved	58,749	65,355
From other sources ..	20,202	19,567
	£391,860	£419,650

		Year ended 31st March,	
		1910.	1911.
<i>Expenditure.</i>		£	£
Hospital maintenance	.. ..	187,922	200,691
Charitable aid—			
Indoor relief	.. ..	53,830	62,848
Outdoor relief	.. ..	38,988	33,051
Administration	.. ..	17,295	20,446
New buildings and additions	.. ..	69,719	81,473
Other expenses	.. ..	7,321	17,875
		£375,075	£416,384

“Other expenses” includes repayments of loans, amounts paid to other Hospital and Charitable Aid Boards, rents, rates, and taxes, and contractors deposits returned.

				Year ended 31st March, 1911.
Average number of patients per diem	..	..	..	1,839
Number of patients under treatment	..	..	..	23,574
Deaths	..	..	..	1,722
Individual average day's stay	..	..	..	28
Average number of occupied beds to each of nursing staff	..	..	..	2·3
Average annual cost of maintenance per occupied bed	..	..	..	£96 19s. 0d.
Average annual payment by patient per occupied bed	..	..	..	£20 17s. 0d.
Number of out-patients attended during year	..	..	..	18,504

It is provided by the Act that, except in case of emergency, the hours of employment of nurses, probationers, and dressers in any hospital shall not exceed fifty-six in any one week.

COMPARISON OF HOSPITAL AND CHARITABLE-AID EXPENDITURE SINCE 1894-95, AND THE COST PER HEAD OF THE POPULATION.

Year.	Mean Population.	General Hospital Expenditure.	Proportion of Expenditure per Head of the Population.	Charitable-aid Expenditure.	Proportion of Expenditure per Head of the Population.	General Hospital and Charitable-aid Expenditure.	Proportion of Cost per Head of the Population.
1894-95	683,111	£ 91,169	s. 2 d. 8½	£ 86,555	s. 2 d. 6½	£ 177,724	s. 5 d. 2½
1895-96	696,331	92,927	2 8½	106,536	3 0½	199,463	5 8½
1896-97	710,418	96,379	2 8½	89,668	2 6½	186,047	5 2½
1897-98	724,681	95,700	2 7½	86,073	2 4½	181,773	5 0
1898-99	739,193	105,752	2 10½	93,071	2 6	198,823	5 4½
1899-1900	752,644	108,257	2 10½	77,603	2 0½	185,860	4 11½
1900-1	765,668	117,535	3 1	79,873	2 0½	197,408	5 1½
1901-2	781,356	123,366	3 1½	88,849	2 3½	212,215	5 5
1902-3	802,419	138,027	3 5½	93,158	2 3½	231,185	5 9
1903-4	826,902	153,768	3 8½	89,232	2 2	243,000	5 10½
1904-5	851,964	166,277	3 10½	93,339	2 2½	259,616	6 1
1905-6	877,469	167,437	3 10	103,273	2 4	270,710	6 2
1906-7	901,920	185,942	4 1½	102,866	2 3½	288,808	6 4½
1907-8	925,727	210,780	4 6½	104,417	2 3½	315,197	6 10
1908-9	945,063	236,803	5 0	112,818	2 4½	349,621	7 4½
1909-10	977,906	237,588	4 10½	112,834	2 3½	350,422	7 1½
1910-11	997,974	247,408	4 11½	135,906	2 8½	383,314	7 8

Capital expenditure is included, and this being variable would cause some slight fluctuation in the rate per head of the population.

Private Hospitals.

The Private Hospitals Act, which came into force on the 1st January, 1907, is now superseded by the Hospitals and Charitable Institutions Act, 1909, which provides for the licensing, management, and inspection of private hospitals. All such institutions must be licensed, and every application for a license must be accompanied by a statement giving full description of the house proposed to be used, number of patients, and class of cases proposed to be received. The licensee shall state whether it is in respect of a lying-in private hospital or a surgical and medical private hospital, or if for both classes of cases, and no private hospital shall be used for any purpose other than that in respect of which the license is granted and purposes reasonably incidental thereto.

For every private hospital there must be a resident manager, either the licensee or some person appointed by the licensee, and in every case the manager must be a legally qualified medical practitioner or a registered nurse in the case of a surgical and medical hospital, or a registered midwife in the case of a lying-in hospital, or a registered nurse and midwife, or a registered nurse having as resident assistant a registered midwife in the case of a hospital licensed for both purposes. No license shall be granted in respect of a house not previously licensed until such house and annexed buildings have been approved by the Inspector-General of Hospitals, and no addition shall be made to any private hospital until it has been so approved. No license shall be granted until the character and fitness of the applicant have been proved satisfactory, and the license must be renewed on the 1st January of each year.

In every private hospital there must be kept a register of patients showing particulars as to name, age, abode, and date of reception of each patient, date when such patient left, or in the event of death the date thereof, name of medical practitioner attending, and such other details as may be prescribed. Inquiry may be made at any time as to the management and conduct of any such private hospital, and if such inquiry prove unsatisfactory the license may be revoked, and no new license shall be granted to the person whose license is so revoked, for a period of five years.

Provision is made for the visitation and inspection of private hospitals in the same manner as for public institutions of the like nature.

The Governor may from time to time make such regulations as are necessary for carrying the Act into effect, and substantial penalties are provided for breaches of its provisions.

Charitable Institutions.

As previously remarked, State charitable institutions are administered by combined Hospital and Charitable Aid Boards, who also distribute outdoor relief. Most of the aged needy are provided with old-

age pensions of £26 per annum, but many of these old people prefer to enter a public home, where they are better cared for and at less cost than could be possible with individuals. In these cases the pension is received by the officers of the Board, as payment for the maintenance of the pensioner, but a proportion is handed over to the latter to be expended as he or she may choose.

Where public and private charitable organizations operate side by side independently of each other there is sure to be an overlapping in the collection of funds and the distribution of relief. The Inspector-General of Charitable Institutions has taken steps to endeavour to secure co-operation between public and private charities, in order to avoid any duplication in future. The average cost of maintenance per occupied bed of the old peoples' homes under the control of Hospital Boards for the year 1910-11 was £28 10s.; the average number of inmates 1,186; the number of beds available being 1,583.

Orphanages and other Children's Homes.

Exclusive of industrial schools there are as far as is known some thirty institutions that may be described as orphanages or children's homes. The majority of these are under official inspection, as they receive for payment children who are under six years of age. By an amendment of the Education Act passed last year provision is made for the inspection of all orphanages and cognate institutions by Inspectors of the Education Department, with a view to securing that as regards education of the children and general management these organizations are acting consistently with the laws governing the education, care, and upbringing of children who are maintained in kindred institutions.

Sale of Food and Drugs.

In order to make better provision for the sale of food and drugs in a pure state, the Sale of Food and Drugs Act was passed by the Legislature, and came into operation on the 1st January, 1908.

The Act is administered by the officers of the Public Health Department, and provides for the analysis, by public analysts, of any article of food or drink, or of any drug, which may be sold, offered for sale, or exposed for sale, and for the inspection of any place where there is any food or drug intended for sale. If any such article be proved to be unfit for human consumption, or likely to cause injury to health if consumed, heavy penalties may be inflicted on the person or persons responsible.

Stringent measures are provided for the prevention of adulteration of food, drink, or drugs, and for the inspection of places where such things are manufactured or packed. The selling of light-weight bread is an offence under the Act, as is also the taking-back of

bread after it has been in the possession of the purchaser for more than an hour.

Any person may, on payment of the prescribed fee, together with the cost of the sample, require any authorized officer to purchase a sample of any food or drug and submit the same for analysis.

Regulations under the Act were published in the *New Zealand Gazette* on the 20th February, 1908. Standards for the control of the purity of food stuffs and of drugs, on the lines recommended by the Australian Inter-State Conference, are in course of preparation.

Mental Hospitals.

There are six public mental hospitals in the Dominion, maintained wholly or in part out of the public revenue. There is also one private hospital, licensed by the Governor for the reception of the mentally afflicted.

The number of patients under treatment at the end of 1910 was 3,670, consisting of 2,160 males and 1,510 females. These numbers include Maoris, of whom there were 28 males and 14 female patients. Excluding the Native race the number of first admissions and rate per 10,000 of population for each of the past five years was as follows:—

FIRST ADMISSIONS AND RATE PER 10,000 OF POPULATION, 1906-10.

Year.	Number of First Admissions.			Proportion per 10,000 of Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
1906	323	206	529	6·81	4·89	5·91
1907	285	184	469	5·85	4·26	5·10
1908	354	245	599	7·06	5·52	6·34
1909	343	223	566	6·66	4·80	5·82
1910	397	242	639	7·56	5·17	6·44
Means of five years	340	220	560	6·79	4·93	5·92

The Inspector-General of Mental Hospitals, in a recent report, points out that one of the probable causes tending to increase the number of admissions is the recognition that these institutions are not places for mere segregation, but for the active treatment of persons of unsound mind, thus a greater number of persons in the earlier and more hopeful stages of their malady are received. The number of patients remaining at the close of each of the past five years, and the proportion per 10,000 of the population, excluding Maoris, is shown in the following table:—

NUMBER REMAINING, 1906-10.

Year.	Number remaining at Close of Year.			Proportion per 10,000 of Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
1906	1,879	1,293	3,172	39·01	30·28	34·91
1907	1,885	1,319	3,204	38·26	30·19	34·47
1908	1,969	1,406	3,375	38·58	31·22	35·13
1909	2,059	1,452	3,511	39·56	31·39	35·72
1910	2,132	1,496	3,628	40·60	31·99	36·54
Means of five years	1,985	1,393	3,378	39·20	31·01	35·35

The number of Maoris admitted as patients to the mental hospitals is small. These and the number remaining at the close of each of the past five years are shown below:—

MAORIS ADMITTED AND REMAINING, 1906-10.

Year.	Admitted.		Remaining at Close of Year.	
	Males.	Females.	Males.	Females.
1906	6	2	21	13
1907	4	2	24	12
1908	7	4	28	11
1909	9	4	24	14
1910	13	3	28	14

The Maori population can be ascertained only once in five years, when a census is taken. Applying the number at the last census to the means of the above five years, it is found that the ratio of admissions is 2·26 per 10,000 of the Maori population, and of those remaining 7·96 per 10,000.

Dealing with patients of all races, the next table gives the average number resident, those who were discharged as recovered, and those who died, during the period 1906-10:—

Year.	Average Number Resident.	Discharged as recovered.		Died.	
		Number.	Per Cent. of Average Number Resident.	Number.	Per Cent. of Average Number Resident.
1906	3,088	283	9·16	231	7·48
1907	3,136	299	9·54	232	7·39
1908	3,240	326	10·06	222	6·85
1909	3,374	349	10·34	204	6·05
1910	3,473	327	9·42	283	8·15
Means for five years	3,262	317	9·70	234	7·18

The system of caring for and treating the insane is practically the same in New Zealand as in New South Wales, so that the following comparisons may be made, remarking that in the latter State sunstroke is a frequent cause of admission. The figures are for the year 1908 :—

	New South Wales.	New Zealand.
Number of admissions	969	733
Proportion per 1,000 of population ..	0·60	0·78
Number discharged as recovered or relieved	467	348
Proportion per cent. of average number resident	8·71	10·74
Number who died	402	222
Proportion per cent. of average number resident	7·50	6·85

Although the proportion of admissions to population is higher in New Zealand than in New South Wales, the proportion discharged is also greater and the death-rate is lower, seeming to indicate, at any rate on the results of the year, that a greater number of patients in the earlier stages of or suffering from milder forms of mental disease are admitted to the hospitals in the Dominion than to those in New South Wales.

The total expenditure on maintenance of mental hospitals (not including the cost of new buildings and additions), receipts from patients and for sale of produce, &c., and the average net cost per annum for each patient during the past five years, was as follows :—

Year.	Total Expenditure.	Receipts from Patients, Sale of Produce, &c.	Net Expenditure.	Average Net Expenditure per Patient.
	£	£	£	£ s. d.
1906 ..	107,169	26,396	80,773	26 10 6
1907 ..	109,590	30,349	79,241	25 11 10
1908 ..	116,474	31,666	84,808	26 10 8
1909 ..	118,377	35,089	83,288	25 0 4
1910 ..	118,268	32,133	86,135	25 2 1

The total expenditure out of the Public Works Fund for buildings and equipment from 1st July, 1877, to 31st March, 1911, was £597,799.

A license, renewable every twelve months, may be granted to enable a private mental hospital to receive patients for treatment. Stringent conditions are attached to the issue of such licenses, which may be revoked after seven days' notice. The Inspector-General has wide powers in the regulation and control of private institutions, which are placed practically on the same footing as public mental hospitals in regard to inspection and other matters. There is only one licensed private institution in the Dominion, that at Wakari, established in 1882. Particulars of admissions, discharges, deaths, and patients remaining, for the last five years are as follows. These figures are included in the tables given above :—

PRIVATE MENTAL HOSPITAL (included above).

Year.	Admissions.	Discharges.	Deaths.	Patients remaining at End of Year.
1906	21	18	5	42
1907	19	14	3	44
1908	12	9	..	47
1909	18	21	..	44
1910	11	12	1	42

The amount of sleeping-accommodation provided in each of the public mental hospitals is shown in tabular form, giving separately the number and cubic contents of the sleeping-rooms intended for one person only, and of the dormitories occupied by several inmates conjointly, together with the number of patients actually in the hospitals on the 31st December, 1910:—

	Sleeping-rooms for One Person only.			Dormitories for more than One Person.		
	Number.	Aggregate Number of Cubic Feet.	Inmates (Patients) on 31st December, 1910.	Number.	Aggregate Number of Cubic Feet.	Inmates (Patients) on 31st December, 1910.
Auckland ..	140	121,776	140	35	355,607	650
Porirua ..	124	124,827	124	29	439,424	773
Nelson ..	30	25,341	30	16	105,081	160
Hokitika ..	37	28,559	37	11	112,199	155
Christchurch	81	69,651	81	38	266,200	598
Seacliff ..	226	178,904	226	64	354,524	654
Totals ..	638	599,682	638	193	1,633,035	2,990

At Ashburn Hall, Wakari, there are seventy-eight rooms, each for one person only, with an aggregate cubic content of 77,461 ft.

SECTION XIV.—MINING.

THE natural mineral resources of New Zealand are very great, and have exercised in the past a most important influence on the development and progress of the Dominion. Gold to the value of £77,437,131 was obtained up to the 31st December, 1910; the value of the produce for the year 1910 having been £1,896,328. In the earliest years the gold was obtained from alluvial diggings, but at the present time the greatest quantity is taken from gold-bearing quartz, which is distributed widely through several parts of the country, and thus there is a much better prospect of the comparative permanency of this industry than alluvial diggings alone could give.

The yield of silver to the end of 1910 amounted to £1,618,522 in value, the quantity mined in 1910 having been 1,711,235 oz., valued at £171,562.

Of other minerals, the value of the product to the same date amounts to £32,569,141, of which kauri-gum yielded £15,413,445, and coal, with coke, £16,734,697.

The quantities and values of precious metals and minerals obtained during the year 1910, and the total value of all mining produce since 1853, are:—

1910.				Total Value since 1853.
		Oz.	£	£
Gold	.. ..	478,288	1,896,328	77,437,131
Silver	.. ..	1,711,235	171,562	1,618,522
		2,189,523	2,067,890	79,055,653
		Tons.		
Copper-ore	.. ..	..	..	19,198
Chrome-ore	.. ..	..	..	38,002
Antimony-ore	.. ..	..	..	54,849
Manganese-ore	.. ..	5	15	61,901
Scheelite-ore	.. ..	143	15,070	55,065
Mixed minerals	.. ..	2,145 ⁹ / ₂₀	7,132	184,769
Coal	.. ..	2,197,362	1,219,737	16,709,820
Coke (exported)	.. ..	6	10	24,877
Kauri-gum	.. ..	8,693	465,044	15,413,445
Shale	.. ..	..	..	7,215
		£3,774,898		£111,624,794

MINERAL PRODUCTION (VALUE) OF AUSTRALASIA TO END OF 1909.

The total value of mineral production for Australasia to the end of the year 1909 is shown in the following table :—

Country.	Gold.	Silver and Silver- lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New S'th Wales	57,189,282	51,713,516	10,127,952	8,454,290	59,250,851	11,554,914	198,290,805
Victoria. ...	285,100,389	213,510	213,223	769,824	1,712,673	358,887	288,368,506
Queensland ...	70,224,573	1,920,950	7,166,279	7,195,083	4,392,151	1,459,797	92,358,833
South Australia	2,840,206	411,480	26,969,174	247,884	...	1,188,855	31,657,599
W'st'n Australia	91,780,563	616,518	878,482	883,198	708,725	73,673	94,941,159
Tasmania... ..	6,956,504	5,448,713	8,840,916	10,178,621	473,572	470,261	15,106,387
New Zealand ...	75,540,803	1,446,960	19,198	...	15,490,083	15,352,852*	107,849,896
	589,682,320	61,771,647	54,215,224	27,728,900	82,028,055	30,459,239	845,835,385

* Inclusive of kauri-gum, £14,948,401.

GOLD.

The discovery of metalliferous ore and minerals in New Zealand was made shortly after gold was found in Australia. It was not, however, until 1852 that the discovery of auriferous deposits was made generally known by Mr. C. Ring, at Coromandel, who obtained a small quantity of gold, intermixed with quartz, in a creek which now bears his name; but the hostility of the Natives prevented further discovery until 1862, when the district was proclaimed a goldfield.

In the South Island, small samples of gold were discovered in the Otago District in 1853, at a place known as the Fortifications, which is now in the West Taieri goldfield.

The first payable goldfield was at Collingwood, in the Nelson District, which was opened in 1857, and in that year 10,437 oz. of gold were produced. Owing, however, to the smallness of the population at that time, as well as to the great attraction presented by the Australian goldfields, very little attention was given to the gold discoveries in New Zealand. From 1857 up to 1861, when gold was discovered at Tuapeka, or Gabriel's Gully, in Otago, the produce of the Collingwood goldfield amounted only to 41,872 oz. of gold.

Early in 1861 gold was discovered near the Lindis River, but the general yield of gold from this portion of the Otago District has never been great. Shortly after the discovery of gold at the Lindis, Mr. Gabriel Read, formerly a digger on the Victorian goldfields, found gold in Gabriel's Gully, where the auriferous deposits were so rich and so easily worked that the discovery flashed like lightning throughout the whole of the Australian goldfields, then just beginning to be on the wane, and thousands of miners on the Australian soil quickly collected all their belongings, which in those days were easily carried, and came to New Zealand to try and better their fortunes. It may be mentioned that the first real discoverer of gold in payable quantities for working was Mr. Edward Peters, a

native of Bombay, who, in 1858, found gold in the south branch of the Tokomairiro River, known afterwards as Woolshed Diggings, and who stated at that time that the ground was payable for working, showing a good sample of gold that he had obtained. After this he again found gold in a gully near the north bank of the Tuapeka River not far from the afterwards celebrated Gabriel's Gully, discovered at a later date by Mr. Gabriel Read. This discovery was made known in June, 1861, and by the end of December in that year 187,696 oz. of gold, representing a value of £727,321, had been produced from this locality alone; and the population of Otago had increased in six months from 12,000 to 30,000.

As soon as the rush set in to Gabriel's Gully, Weatherstone's, Munroe's, and Waitahuna Gullies were opened, and early in 1862 further auriferous deposits were found at Waipori and the Woolshed. Discoveries of smaller extent were afterwards found at Turnbull Gully, Deepdell Creek, Fillyburn, and Murphy's Gully.

In August, 1862, Messrs. Hartley and Reilly arrived at Dunedin with 1,047 oz. gold, which they had found by cradling and washing the sands on the beaches of the Clutha River, between the sites of the present towns of Clyde and Cromwell. As soon as this became known the excitement was so great that men left lucrative employment and comfortable homes to follow the life of a digger. Prices of agricultural produce and food of all descriptions went up, and the demand for teamsters to take goods and tools to this new Eldorado was so great that £120 per ton was paid for the carriage of goods from Dunedin; and on the arrival of the first wagon with flour, at Mr. Sheenan's station, nine miles from the diggings, it was surrounded by a crowd of miners from the field, when the whole of the flour was handed out and equally distributed to the crowd at 2s. 6d. a pannikinful. The demand for sawn timber was also so great that boards were stripped from drays and wagons and sold, the usual price for an empty gin-case being £5. Every one at that time was thoroughly satisfied with his earnings—the beaches along the river were literally strewn with golden sand. But this state of things did not last long. As soon as the snow on the mountains began to melt, the water in the river rose to a height of from 16 ft. to 20 ft., covering all the auriferous gravel-beaches, leaving those who had been working there in a very despondent state. By this time a large mining population had gathered on the field, and they turned their attention to the beds of the different streams and creeks flowing into the Clutha River, and almost immediately rich deposits of auriferous drift were discovered at Conroy's, Butcher's, Potter's, and Campbell's Gullies, also at Bannockburn, Cardrona, Arrow, Shotover, Skipper's, Nokomai, and the Nevis, all of which have largely contributed to the product of gold. Before the end of December, 1862, over 70,000 oz. of gold were forwarded by escort from Dunstan to Dunedin.

In March, 1863, and the following months, the Teviot, Benger, and Upper Manuherikia Goldfields were opened up, and in May of

the same year another important find was made by Mr. W. Parker, at Hogburn, which afterwards led to further discoveries of auriferous drifts at Hill's Creek, Dunstan Creek, Kyeburn, Hyde, Hamilton's, Macrae's, and Mount Burster. This last place is at so high an elevation (nearly 4,000 ft. above sea-level) that the rich auriferous deposits existing there can be worked only for about six or seven months in the year.

Further discoveries have been made from time to time at Cambrian's, Tinker's, Matakauui, Round Hill, Orepuki, and, in recent years, at Mount Criffel—the latter being 4,000 ft. above sea-level—where are found some of the oldest drifts that exist in the Otago District. Gold intermixed with platinum has also been found on the beaches of the Waiau River, south of Orepuki.

About the end of 1863 gold was found at Wakamarina, in the Marlborough District, where some very rich finds were obtained from the beds of the Deep Creek, Dead-horse Creek, and Wakamarina River. This field still continues to support a small number of miners.

Early in 1864 a party of Maoris, while searching for greenstone—which was formerly used for making tomahawks and adzes, and is still highly prized as an ornament—found gold in the bed of the Greenstone River, on the west coast of the South Island. This discovery led to a large rush from other parts of New Zealand, and also from Australia.

As soon as the rush set in to the West Coast, the auriferous deposits at Waimea, Kanieri, Blue Spur, and Jones's (now known as Ross) were discovered, and these led to further discoveries in the Grey Valley, No Town, Red Jack's, Noble's, Orwell Creek, Antonio's, Maori Gully, Lyell, Charleston, and Brighton, the last extensive field opened up on the West Coast being Kumara.

QUARTZ-MINING.

During the early period gold-mining operations were chiefly confined to alluvial drifts. This was especially the case in regard to the South Island, but in the North Island all the gold has been obtained from quartz lodes. In July, 1867, gold was discovered in a creek-bed at the Thames in pieces of quartz, and on the 10th August of the same year Messrs. Hunt, White, Clarkson, and Copley found a very rich leader of auriferous quartz in the Kuranui Stream. This led to discoveries of large quantities of gold in the Shotover, Moanataiari, Long Drive, Caledonian, and other claims. The dividend from the Caledonian claim in one year amounted to about £657,000. Several years later gold-bearing lodes were discovered at Karangahake, Waitekauri, Waihi, Te Aroha, and Kuaotunu.

In 1872 the Reefton field was discovered, and since then quartz-crushing has steadily continued, and the industry supports a large population.

A number of auriferous quartz-mines have been working profitably for many years, and fresh bodies of valuable ore are being discovered from time to time. The gold-production of this district during 1910 was 59,792 oz., valued at £229,315.

The most important quartz-mining proposition worked in New Zealand is the Waihi Company's mine, situate about one day's journey south-east of Auckland. The company was registered in 1887, and has a paid-up capital of £500,000 in £1 shares, the bulk of which are held in London, the number on the New Zealand Register in June, 1911, being 144,861, divided among 2,153 shareholders. The value of bullion produced since the inception of the company is £9,106,318, of which £4,854,764 was expended in working the mine and £4,251,554 in dividends. The value of gold and silver produced during 1910 was £926,100, and the working-expenses for the same period were £379,777. The number of men employed by the company in New Zealand on 31st December last was 1,400.

The quantity of ore treated and the value of bullion produced from the quartz-mines in each mining district of the Dominion during the years 1909 and 1910 is shown in the following table:—

District.	Tons of Ore treated.		Value of Bullion.	
	1909.	1910.	1909.	1910.
Northern	573,470	556,170	£ 1,301,002	£ 1,324,582
West Coast	108,136	121,832	214,876	230,807
Southern	11,400	10,658	10,983	8,800
Totals	693,006	688,660	1,526,861	1,564,189

ALLUVIAL MINING.

The production from 293 alluvial claims, both large and small, amounted in value to £188,464; but, as most of these claims are privately owned, the gross amount of dividends paid is not known. Fourteen claims, however, the property of registered companies, paid £11,411 to their shareholders during the year. Among the most profitable of these dividend-paying claims may be mentioned the Mont d'Or (Ross, Westland), £1,800; Roxburgh Amalgamated (Otago), £729; Nokomai Hydraulic Sluicing (Southland), £4,200; and the Round Hill (Southland), £1,130.

GOLD-DREDGING.

This system of alluvial mining, which had New Zealand for its cradle, although now adopted in other countries, has probably produced about nine millions sterling of the total gold-production of this Dominion.

To enable dredge-mining to be carried out profitably, even when the ground to be operated upon is payably auriferous, it is necessary

that a number of favourable conditions shall exist, the absence of any one of which may render unprofitable the undertaking. The presence of snags, or of large boulders, the hardness of the matrix surrounding the same, a hard and rough bottom from which the dredge-buckets are unable to clean up the gold, and in connection with paddock dredges the limited space of operations causing the gold to be stirred up and held in suspension in the muddy water, are all causes any one of which may render unprofitable an otherwise promising proposition. There is therefore no cause for surprise that the system of alluvial mining by hydraulic sluicing and elevating is now being applied whenever practicable in preference to the bucket-and-ladder dredge.

During 1910 the number of working dredges decreased by 7. At the end of the year there were 104 dredges at work, 35 of which, the property of registered companies, gave an average return of £3,031, and paid in dividends an average of £1,483 per dredge. The total value of gold produced during the year by dredging was £315,237, and the number of persons ordinarily employed was 838.

GOLD EXPORTED TO 31ST MARCH, 1911.

The total quantity of gold entered for export during the years ending 31st March, 1911, and 31st March, 1910, for the several districts, and the total quantity and value of the gold exported from the 1st January, 1857, to the 31st March, 1911, are shown hereunder; but this does not necessarily include the whole of the gold produced, as no doubt much has been taken away from time to time by people who have evaded the duty, and a good deal has been used for industrial purposes:—

TABLE SHOWING THE QUANTITY AND VALUE OF GOLD ENTERED FOR EXPORTATION FROM NEW ZEALAND FOR THE YEARS ENDED THE 31ST MARCH, 1911 AND 1910, AND THE TOTAL QUANTITY AND VALUE FROM JANUARY, 1857, TO 31ST MARCH, 1911.

District.	Year ending 31st March, 1911.		Year ending 31st March, 1910.		Increase or Decrease for Year ending 31st March, 1911.	Total Quantity and Value from January, 1857, to 31st March, 1911.		
	Quan- tity.	Value.	Quan- tity.	Value.				
	Oz.	£	Oz.	£	Oz.	Oz.	£	
Auckland ..	279,673	1,111,099	298,070	1,179,870	-18,397	5,220,015	19,856,029	
Wellington..	..	..	..	..	..	188	708	
Marlborough	89	332	39	155	+44	90,313	351,856	
Nelson ..	1,565	6,254	2,033	8,131	-468	1,725,368	6,842,315	
West Coast..	97,219	381,259	93,795	363,659	+3,424	5,625,280	22,362,587	
Canterbury..	..	..	..	..	..	99	383	
Otago ..	103,369	416,941	109,273	440,363	-5,904	7,165,597	28,493,897	
Totals ..	481,909	1,915,885	508,210	1,992,178	-21,301	19,827,360	77,907,772	

It will be seen from the above table that there was last year a decrease in the export of gold of 21,301 oz. on the figures for the preceding twelve months.

Of the total quantity of gold exported in 1910-11 Auckland contributed 58·03 per cent.; Marlborough, 0·02 per cent.; Nelson, 0·33 per cent.; West Coast, 20·17 per cent.; and Otago, 21·45 per cent.

GOLD-PRODUCTION OF AUSTRALIA AND NEW ZEALAND.

The gold-yield of Australia and New Zealand (in fine ounces) for the years 1899, 1903, and 1909 was as follows:—

	1899.	1903.	1909.
	Fine Ounces.	Fine Ounces.	Fine Ounces.
New South Wales ..	382,162	254,260	204,708
Victoria ..	804,666	767,347	654,222
Queensland ..	668,227	668,546	455,579
South Australia ..	18,633	21,247	12,796
Western Australia ..	1,470,606	2,064,803	1,595,270
Tasmania ..	77,111	59,892	44,777
New Zealand ..	356,231	479,746	472,464
Total ..	3,777,636	4,815,841	3,439,816

The value is as follows: 1899, £16,046,363; 1903, £18,332,515, 1909, £14,611,409.

GOLD-PRODUCTION OF THE WORLD.

The following summary of the world's production of gold (in fine ounces) is taken from a report furnished by the Director of the United States Mint:—

The quantity of gold produced throughout the world during 1908 greatly exceeded that for any previous year. The total compares with that for the years 1903-7 as follows:—

	Fine Ounces.
1908 ..	21,378,481
1907 ..	19,956,283
1906 ..	19,471,080
1905 ..	18,396,451
1904 ..	16,804,372
1903 ..	15,852,620

The total for the triennial period 1903-5 is 51,053,443 oz. of a value of £216,861,100, and that for the triennial period 1906-8 was 60,805,844 oz. of a value of £258,296,600, and for the six years the total production is 111,859,287 oz. of a value of £475,147,700.

The following table states the production in the principal countries for the three years 1906-8:—

	1906.	1907.	1908.
	Fine Ounces.	Fine Ounces.	Fine Ounces.
Africa ..	6,547,943	7,352,228	8,055,430
Australasia ..	3,985,684	3,660,911	3,547,210
North America ..	6,043,605	5,684,043	6,032,662
South and Central America ..	609,554	673,171	804,484
Russia ..	943,142	1,290,854	1,357,027
India ..	584,744	502,307	512,702
Japan and Corea ..	243,417	239,159	287,126
China ..	217,688	217,688	418,312
All other ..	295,303	335,922	363,528
Total ..	19,471,080	19,956,283	21,378,481

The increase in the production from 1906 to 1908 is accounted for mainly by the Transvaal and Russia. South and Central America, Japan and Corea, and China have also shown larger outputs.

The whole of the gold-production is not converted into coin for currency purposes. The production is utilized first, in the active monetary circulation of the world; second, for hoarding purposes; and third, in the industrial arts. To arrive exactly at the amount under each heading is impossible. But the director of the Mint has through the consuls and others made the most searching inquiries, with the result that he estimates that the world's industrial consumption of gold in 1908 amounted to 5,514,557 ounces. The following comparison of the production and the industrial consumption for the years 1907 and 1908 is interesting:—

		1907. Ounces.	1908. Ounces.
World's production	.. ..	19,956,283	21,378,481
Industrial consumption	.. ..	6,532,874	5,514,557
Otherwise used	.. ..	13,423,409	15,863,924

The proportion of industrial consumption in 1907 was a little over 32½ per cent., and in 1908 it was a little over 25½ per cent. A considerable variation is shown, but in any case the quantity used industrially is very large. Of the balance it is impossible to say how much is accounted for by the practice of hoarding. It is equally impossible to arrive at the amount added annually to the monetary currency of the world. It may be anything between £40,000,000 and £50,000,000. Whatever may be the exact amount it is evident that the annual production of gold is easily absorbed.

NUMBER OF GOLD-MINERS.

The total number of gold-miners employed in 1910 was 8,081, of whom 7,758 were Europeans and 323 were Chinese, as against a total of 7,495 for the previous year. In some places, more especially in Otago, Nelson, and on the West Coast, many of the miners do not depend entirely on mining, but employ a part of their time in farming and other pursuits.

From the figures given in the next table it will be observed that alluvial mining affords considerably less and quartz-mining more employment than was the case sixteen years ago. The falling-off in the number of Chinese miners indicates the exhaustion of the shallow ground.

Year.	Alluvial Miners.		Quartz-miners.		Total.	
	Europeans.	Chinese.	Europeans.	Chinese.	Europeans.	Chinese.
1893 ..	7,246	2,656	2,295	..	9,541	2,656
1898 ..	7,061	2,039	5,098	..	12,159	2,039
1903 ..	5,592	1,021	3,597	..	9,189	1,021
1908 ..	3,825	510	4,338	12	8,163	522
1909 ..	3,373	395	3,803	..	7,100	395
1910 ..	3,438	319	4,320	4	7,758	323

COAL-MINING.

The extent of the coal-measures in New Zealand will make coal-mining one of the large industries, especially on the west coast

of the South Island, where bituminous coal exists equal, if not superior, in quality to coal of the same class in any part of the world.

The progressive increase in the output of coal from 1878 to the end of 1910 is shown below:—

Year.	Raised in New Zealand.		Imported.	Total raised in the Dominion and Imported per Annum.	Exported (excluding Coal for Fuel by Ocean Steamers).	Total Consumption of Coal within the Dominion.	Yearly Increase in Consumption within the Dominion.
	Total.	Yearly Increase.					
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1878 ..	162,218	..	174,148	336,366	3,921	332,445	..
1879 ..	231,218	69,000	158,076	389,294	7,195	382,099	49,654
1880 ..	299,923	68,705	123,298	423,221	7,021	416,200	34,101
1881 ..	337,262	37,339	129,962	467,224	6,626	460,598	44,398
1882 ..	378,272	41,010	129,582	507,854	4,245	503,609	43,011
1883 ..	421,764	43,492	123,540	545,304	7,172	538,132	34,523
1884 ..	480,831	59,067	148,444	629,275	6,354	622,921	84,789
1885 ..	511,063	30,232	130,202	641,265	2,371	638,894	15,973
1886 ..	534,353	23,290	119,873	654,226	2,862	651,364	12,470
1887 ..	558,620	24,267	107,230	665,850	12,951	652,899	1,535
1888 ..	613,895	55,275	101,341	715,236	27,678	687,558	34,659
1889 ..	586,445	-27,450*	128,063	714,508	39,290	675,218	12,340
1890 ..	637,397	50,952	110,939	748,336	33,404	714,932	39,714
1891 ..	668,794	31,397	125,318	794,112	29,093	764,019	49,087
1892 ..	673,315	4,521	125,453	798,768	28,169	770,599	6,580
1893 ..	691,548	18,233	117,444	808,992	24,288	784,704	14,105
1894 ..	719,546	27,998	112,961	832,507	25,449	807,058	22,354
1895 ..	726,654	7,108	108,198	834,852	26,151	808,701	1,643
1896 ..	792,851	66,197	101,756	894,607	27,974	866,633	57,932
1897 ..	840,713	47,862	110,907	951,620	26,639	924,981	58,348
1898 ..	907,033	66,320	115,427	1,022,460	18,348	1,004,112	79,131
1899 ..	975,234	68,201	99,655	1,074,889	14,146	1,060,743	56,631
1900 ..	1,093,990	118,756	124,033	1,218,023	36,699	1,181,324	120,581
1901 ..	1,227,638	133,648	149,764	1,377,402	77,563	1,299,839	118,515
1902 ..	1,362,702	135,064	127,853	1,490,555	110,666	1,379,889	80,050
1903 ..	1,420,193	57,491	163,923	1,584,116	97,461	1,486,655	106,766
1904 ..	1,537,838	117,645	147,196	1,685,034	56,513	1,628,521	141,866
1905 ..	1,585,756	47,918	169,046	1,754,802	41,257	1,713,545	85,024
1906 ..	1,729,536	143,780	207,567	1,937,103	62,745	1,874,358	160,813
1907 ..	1,831,009	101,473	220,749	2,051,758	51,790	1,999,968	125,610
1908 ..	1,860,975	29,966	287,808	2,148,783	58,192	2,090,591	90,623
1909 ..	1,911,247	50,272	258,185	2,169,432	69,936	2,099,496	8,905
1910 ..	2,197,362	286,115	232,378	2,429,740	92,045	2,337,695	238,199

* Decrease.

It will be seen from the above that, with the exception of 1889, there has been a steady increase in the output of coal year after year since records have been kept by the Mines Department. The yearly increase in output is principally due to the growing demand for consumption within the Dominion. During a period of thirty-three years the annual consumption of coal in New Zealand has increased to the extent of 2,005,250 tons.

The total output from the mines last year was 2,197,362 tons, as against 1,911,247 tons for 1909, an increase of 286,115 tons. The coal imported from other countries was 232,378 tons, against 258,185 tons in 1909, an increase in the importation last year of 25,807 tons. The imports were 232,220 tons from New South Wales, and 158 tons from the United Kingdom. The total export of coal was 277,164 tons, of which 277,011 tons was New Zealand produce. The coal used by direct steamers trading between New Zealand and the United Kingdom has been treated as coal consumed within the Dominion, these steamers trading wholly between New Zealand and Great Britain. Taking, therefore, the output from the mines and the coal imported, there is a total of 2,429,740 tons, of which 92,045 tons were exported, leaving the consumption within the Dominion last year 2,337,695 tons, as against 2,099,496 tons for 1909, an increased consumption of 238,199 tons.

The quantity of coal produced in each district during the years 1909 and 1910, the increase or decrease in each case, and the total output to the end of 1910 is given in the following table:—

Name of Coalfield.	Output of Coal.		Increase or Decrease.	Approximate Total Output of Coal up to the 31st December, 1910.
	1910.	1909.		
	Tons.	Tons.	Tons.	Tons.
Kawakawa and Hikurangi ..	107,866	98,415	+9,451	2,020,882
Whangarei, Kamo, Ngunguru, and Whauwhau	46,931	36,542	+10,389	748,215
Waikato	228,962	192,827	+36,135	2,596,146
Mokau	1,405	6,415	- 2,010	73,987
Miranda	12,344	13,720	- 1,376	114,586
Drury	156	451	- 295	1,196
Pelorus	120	..	+ 120	831
West Wanganui	28,600	12,750	+15,850	171,377
Buller	831,200	718,419	+112,781	9,882,232
Reefton	14,451	10,502	+ 3,949	190,944
Grey	466,661	380,971	+85,690	5,935,796
Canterbury	23,708	21,866	+ 1,842	621,465
Otago	291,441	286,997	+ 4,444	7,081,716
Southland	140,517	131,372	+ 9,145	1,777,753
Totals	2,197,362	1,911,247	286,115	31,217,126

(-) Decrease. (+) Increase.

As regards the quality of the coal, it cannot be surpassed. The late Sir John Coode, in his presidential address to the Institute of Civil Engineers, London, stated: "The bituminous coal found on the west coast of the South Island is declared by engineers to be fully equal, if not superior, to the best description from any part of the world."

The quantity of each class of coal produced in 1910 and 1909 was :—

Class of Coal.	Output of Coal.		Increase or Decrease.	Approximate Total Output of Coal up to the 31st December, 1910.
	1910.	1909.		
	Tons.	Tons.	Tons.	Tons.
Bituminous and semi-bituminous	1,495,709	1,257,233	238,476	18,550,088
Pitch	6,068	5,473	595	1,982,671
Brown	594,995	559,509	35,486	9,304,324
Lignite	100,590	89,032	11,558	1,380,043
Totals	2,197,362	1,911,247	286,115	31,217,126

The number of coal-mines working during the year 1910, the hands employed, and the output is shown by the next table.

Number of Mines working.	Number of Persons employed at each Mine.	Number of Persons employed.		Output of Coal during 1910.	Average Output per Person employed.	
		Above Ground.	Below Ground.		Below Ground.	Above and below Ground.
120	1 to 20 in each	145	289	Tons. 178,429	617	411
8	21 " 50 "	68	183	113,993	623	454
6	51 " 100 "	115	372	279,288	751	573
6	101 " 250 "	267	643	359,523	559	395
6	251 and upwards	538	1,975	1,265,221	641	503
146	..	1,133	3,462	2,196,454	..	..
21	Private pits ..	3	1	908	..	..
167	..	1,136	3,463	2,197,362	634*	478*

* Excluding private pits.

The economy in large scale operations is well illustrated by the above table. The superior equipment of the large mines enables a greater average quantity per man to be produced.

STATE COAL-MINES.

There are two collieries owned and worked by the State, one at Seddonville, the other at Point Elizabeth. The former is situated twenty-nine miles in a northerly direction from the Port of Westport, and connected therewith by a railway. The colliery contains a large quantity of excellent hard coal valuable for steam and household purposes, and during 1910 produced 62,714 tons. There is in this mine a considerable quantity of soft coal, suitable for the manufacture of briquettes, and a plant for this purpose has been erected at the port of shipment, producing an article of fuel highly recommended for household use.

The Point Elizabeth Colliery lies some five miles north of the Port of Greymouth, the connection being by a State-owned railway, and is equipped with a complete and up-to-date coal-mining and carrying plant. The coal mined is of excellent quality, containing but a small percentage of sulphur, and is largely used for steam-producing purposes on the Government railways. At the present time the mine is capable of an output of 1,500 tons per day if facilities for shipment were sufficient. During the past year 212,888 tons were won. Depots for the sale of coal to the public have been opened at Wellington, Christchurch, Wanganui, and Dunedin.

An area containing a large field of the best bituminous coal has been reserved for State coal-mines, and a second mine is now being opened up and connected with the present railway, and it is expected that the mine will place the coal on the market about June, 1912.

WORLD'S COAL-PRODUCTION.

The total coal produced by the principal countries of the world, so far as can be ascertained, for the years 1904-8 was as follows:—

	1904.	1905.	1906.	1907.	1908.
	1,000 Tons.	1,000 Tons.	1,000 Tons.	1,000 Tons.	1,000 Tons.
British Empire:—					
United Kingdom ..	232,428	236,129	251,068	267,831	261,529
British India ..	8,216	8,418	9,783	11,147	12,770
Canada ..	7,370	7,739	8,717	9,385	9,736
Australian Commonwealth	6,854	7,494	8,596	9,681	10,193
South Africa ..	3,261	3,709	4,184	4,679	4,938
New Zealand ..	1,538	1,586	1,730	1,831	1,861
Other colonies and possessions	111	145	150	179	218
Foreign Countries:—					
United States of America ..	314,122	350,821	369,783	428,896	415,843
German Empire* ..	120,816	121,299	137,118	143,186	148,537
France* ..	33,502	35,218	33,458	35,989	36,874
Belgium* ..	22,761	21,775	23,570	23,705	23,678
Austria-Hungary* ..	11,868	12,585	13,473	13,850	13,875
Russian Empire ..	19,042	18,389	21,302	21,000	22,581
Japan ..	10,062	11,593	12,791	13,716	13,721

* Metric tons of 2,204 lb.

In the year 1886 the total production was 383 millions of tons, and in 1896 547 millions of tons.

ACCIDENTS.

During 1910 there were 14 fatal accidents in coal-mines, causing 16 deaths, and 16 non-fatal accidents, by which 16 persons were injured. Of the fatal accidents 8 were caused by falls in mines, and 6 in various ways. Of the non-fatal accidents 8 were caused by falls in mines and 8 from various causes—6 underground and

2 on the surface. Of the average number of persons employed during the year (4,599) the fatalities were 1 in every 283, and the tonnage of coal raised for each life lost was 137,335.

IRONSANDS AND ORES OF NEW ZEALAND.

Almost every known variety of iron-ore has been discovered in New Zealand. At Parapara, near Nelson, immense quantities of brown hæmatite ore occur on the surface of the ground. When converted, the product is of the variety called white iron. Another deposit, about 60 ft. thick, is that on the west side of Mount Peel. This ore contains 56 per cent. of metallic iron, and has been traced a distance of three miles, beyond which point it is reported to swell out to as much as a mile in width. An extensive and valuable deposit (limonite and glauconite) occurs on the western slope of Mount Royal, Otago. It contains about 37 per cent. of the metal, and as regards both quality and position this deposit is of importance.

The following information on the ore deposits at Parapara is extracted from the Geological Survey Reports: The deposit occurs about a mile south-west of the Parapara River. About five miles north of this is the town of Collingwood, close to which is a mine which yields some of the best coal in New Zealand. A short tramway would enable the ore to be shipped in barges and taken to Collingwood, where there is every facility for the construction of a wharf, at which vessels of any size might lie. There is a large deposit of nearly pure crystalline limestone on the banks of the Parapara River, and the numerous streams in the neighbouring hills would give ample water-power if needed. It is estimated that the main deposit contains nearly 53 millions of tons of ore, but in the absence of any system of prospecting this estimate must not be regarded as in any way conclusive.

In the form of sand, the chief deposits are on the sea-shore of the west coast of both islands, the best known being that near New Plymouth. The Taranaki ironsand has been the subject of many experiments to determine the best method of smelting it. When mixed with clay and moulded in the form of a brick it has been readily smelted in the blast-furnace, and the iron produced is of excellent quality, suitable for steel-making processes. Cheap coal is obtainable from Mokau, a short distance from the ironsand deposits. A variety of articles have been manufactured from the product of the sand and submitted to experts, who have invariably expressed a favourable opinion as to quality and suitability.

SCHEELITE.

Scheelite, one of the principal ores of tungsten, is mined in Otago, at Macrae's Flat, Glenorchy, and Lake Wakatipu. During the year 1910 eight mines were at work, employing twenty-one persons, and producing 143 tons of concentrates. Milling and concentrating plants have been installed, and the product finds a ready market, principally in Germany.

The uses of tungstic acid are various. It is used as a mordant in calico-printing, as a constituent in some finer grades of paint, and renders clothing non-inflammable. Its greatest use, however, is in the manufacture of steel of the very highest grades, such as engineers' tool steel for turning-lathes, and steel for the inner tubes of big guns. It imparts to the steel great density, toughness, and hardness. Such steel is placed on the market by different makers under a variety of names—nickel tungsten steel, high-speed steel, self-hardening steel, &c. It has within the last few years revolutionized engineering methods.

The mineral occurs commonly in mica-schist and altered sedimentary rocks. At Macrae's it is found in bunches and stringers through the quartz. The value of the export from the mines since 1900 has been—

						£
1900	..	..	..	..	..	2,635
1901	..	..	..	..	..	83
1902	..	..	..	..	..	1,200
1903	..	..	..	..	..	1,439
1904	..	..	..	..	..	791
1905	..	..	..	..	..	1,848
1906	..	..	..	..	..	3,407
1907	..	..	..	..	..	15,486
1908	..	..	..	..	..	6,055
1909	..	..	..	..	..	4,263
1910	..	..	..	..	..	15,070

CINNABAR.

A bonus of 4d. per pound on the production of the first 100,000 lb. of quicksilver is offered by the Government. One third of the quantity must be produced before 31st March, 1911, and the remainder before 31st March, 1912. If there are several contributors to the output, the bonus will be divided amongst them.

A plant on a small scale has been erected near Karangahake for the purpose of treating the ore deposits in that neighbourhood, and the proprietors have notified their intention of claiming the bonus. During 1910 70 tons of ore were treated for a yield of 1,200 lb. of mercury, valued at £128.

MINERAL OIL.

Indications of the existence of petroleum have been found in the Dannevirke, Taranaki, Gisborne, Grey, and Southland districts, and a considerable amount of prospecting has been done.

A bonus of £10,000 will be paid by the Government as under:—

- (a.) £2,500 to be paid on proof being submitted that not less than 250,000 gallons of marketable crude oil has been won,
- (b.) £2,500 to be paid on proof being submitted that not less than 500,000 gallons of marketable crude oil has been won.

(c.) £2,500 to be paid on proof being submitted that not less than 1,000,000 gallons of marketable crude oil has been won.

(d.) The balance of £2,500 to be paid to the person or company who first produces from his or their own refining-plant 500,000 gallons of refined mineral oil

The claim must be made and the conditions fulfilled on or before the 31st March, 1915.

The first bonus of £2,500 for the production of 250,000 gallons of marketable crude oil has been paid to the Taranaki Petroleum Company who on the 4th May, 1911, had won 268,000 gallons of crude oil.

PHOSPHATE ROCK.

Fairly extensive deposits of phosphate rock have been discovered as a fringe to the limestone at Clarendon, near Milton, Otago. The Ewing Phosphate Company (Limited) has been formed, and operations of quarrying and burning on a commercial scale have been undertaken. After burning, the rock is crushed and chemically treated. The value of this phosphate as a fertilizer has been satisfactorily proved, and there is every indication of a growing industry in quarrying the rock and preparing it for use. With such a valuable material at our very doors, there is no doubt that in future the importation of phosphate manures will cease, or at least be greatly reduced, whilst the question of export is within the range of possibility.

OTHER METALS OR MINERALS.

Very little has been done to prospect and develop mines other than for gold and silver. The only exports last year of metalliferous products, excluding gold and silver, were 100 tons of auriferous ore, valued at £1,538, 143 tons of scheelite-ore, and small parcels of other minerals, representing an aggregate value of £16,906.

KAURI-GUM.

The quantity of kauri-gum exported last year was 8,693 tons, as against 8,250 tons for 1909. Last year's produce (£465,044) gave an average value of about £53 9s. 11d. per ton, while for 1909 the average was £66 19s. 10d. per ton.

SCHOOLS OF MINES.

Schools of Mines have been established in New Zealand at the principal mining centres, and are of great value for the education of mining and metallurgical students. In connection with these schools the Government offers six scholarships annually, one each for Otago, two for the west coast of the South Island, and three for the North Island. These scholarships, tenable for three years, are awarded to candidates who comply with the conditions and obtain the highest number of marks at the yearly examinations held in each December, and are of the value of £50 each per annum to

successful candidates residing three miles or more beyond the town in which the school is situated, and of £30 each per annum to successful candidates residing within the three-mile limit. The Mines Department will furnish particulars to intending candidates. These scholarships now apply to coal-mining subjects.

The schools of mines annual examinations were held in December, 1910, and 112 students, from seven goldfields schools, presented themselves, and contributed 186 papers on some of the twenty subjects examined into. The standard of efficiency desired is to prepare the students for the Government examinations for mine-managers' and battery-superintendents' certificates of competency in New Zealand and other countries.

The amount expended by the Government on the schools since their inauguration to 31st March, 1911, was £47,706, excluding the amounts paid to the school attached to the University of Otago.

EXAMINATIONS.

Examinations are held by the Boards of Examiners annually of candidates for certificates as first-class and second-class mine-managers, battery superintendents, and dredge-masters. No candidate is permitted to present himself for examination unless he holds an authority from the Secretary to the Board of Examiners stating that his certificates of service comply with the Acts and regulations, and have been accepted by the Board. All necessary information will be supplied by the Secretary to the Board of Examiners, Mines Department, on application.

PROSPECTING.

Three diamond rock-drills, with boring capacity of 2,500 ft., 1,500 ft., and 1,000 ft., respectively, may be hired from the Mines Department on the following conditions: The hirer to take delivery of the plant at any place decided upon by the Minister of Mines. The hirer, prior to the delivery of the plant, to make a deposit of £50, and to find approved bond and security for the payment of all charges he may become liable for, and also for the due observance of the conditions. The plant to be returned in good order and condition, less wear and tear, to the Government Store, Wellington. Any loss or damage to the plant, other than that due to fair wear and tear, to be paid for by the hirer. A superintendent appointed by the Minister shall have sole control of the plant and the workmen employed, and the hirer must comply with his requests *re* housing and care of the plant. The wages of the superintendent will be paid by the Department in the first instance, but will be recovered monthly from the hirer. The hirer must also pay the cost of all carbons used in boring. All the working-expenses of the plant must be paid by the hirer direct. The Department also has two Keystone drillers—one in Otago and one on the West Coast—which are hired to the local

bodies, and are available within their jurisdiction to parties wishing to use them at their own cost.

Subsidies are granted by the State to assist parties of miners prospecting for gold in localities recommended by the Inspector of Mines. During the year 1910 the sum of £3,237 was thus expended in the various mining districts.

Arrangements have been made with the mining companies at the Thames by which the companies contribute £12,000 and the Government £5,000 to the cost of driving a prospecting tunnel at the 1,000 ft. level. Besides prospecting, this tunnel will serve to drain the whole goldfield. The work is being pushed ahead, and the prospects are very promising.

SALIENT FEATURES OF THE ECONOMIC GEOLOGY.

The greater part of the following matter is taken from an article on the salient features of the economic geology of New Zealand by Dr. James Mackintosh Bell, F.G.S., formerly Director of the Geological Survey:—

COAL.

Distribution of Coal.—Perhaps in no country of the world is coal more generally distributed than it is in New Zealand, as it occurs in almost every part of the Dominion—a fact which partly makes up for the lenticular nature of the coal-seams and the inextensiveness of the basins in which they lie, as compared with coal-deposits in other countries. The coal varies considerably in quality, both in regard to the amount of ash and the state of carbonation.

The coals of Kaitangata, Shag Point, and Nightcaps, which form thick seams in Tertiary rocks in the south-eastern part of the South Island, are lignites of good quality. The seams which are so widely distributed in the hilly country west of the Canterbury Plains are all lignites, but not generally so highly carbonized as are the southern coals. The coals of the Greymouth district, and of Westport and Puponga, in the Nelson Land District, are bituminous coals of varying degrees of purity. The coals of the North Island, which are chiefly in the Waikato district, south of Auckland, and near Whangarei, north of Auckland, are in general intermediate in state of carbonation between the bituminous coals and lignites. No extensive seams of true anthracite have as yet been found in New Zealand, though there is a very small deposit in early Tertiary sediments at Cabbage Bay, in the Hauraki Peninsula, which owes its high percentage of fixed carbon to the metamorphism produced by flows of andesite. Some of the lignite seams of Canterbury are in part altered to anthracite, as a product of contact metamorphism. Anthracite occurs also in the Fox River Valley about 20 miles south of Westport.

PETROLEUM.

In many parts of the Dominion there is abundant evidence of petroleum, though in no locality can it be said to have been proven to exist in great quantity. It has been found and exploited to some slight degree at Kotuku, near Greymouth, in Westland; near Gisborne, in the Auckland District; and more especially at New Plymouth, in Taranaki, not far from the base of the lofty cone of Mount Egmont. In the last-mentioned locality the oil seeps out on the surface along the sea-shore and at a few places in the interior, and gas issues at many points along natural crevices. Boring operations have been conducted in this locality for many years, and oil-bearing strata have been struck at depths of, roughly speaking, 1,000 ft., 2,000 ft. and 3,000 ft. The petroliferous beds consist mainly of soft marine sandstones and claystones, having, so far as is known, a gentle dip to

the westward. They appear to be of Miocene age, but the overlying surface beds are probably Pliocene. Recently two of the wells have yielded considerable quantities of oil, and a government bonus has been earned.

IRON-ORE.

There are in New Zealand several interesting deposits of iron-ore. The most important of these appears at Parapara, in the rugged Cape Farewell Peninsula, lying west of Golden Bay, in the South Island; while another is visible on the shores of the Tasman Sea, near New Plymouth.

Parapara Deposits.—The rocks in which the Parapara ore occurs are metamorphic, and consist of much corrugated hornblende and felsipathic schists, sideritic limestones, and cherty quartzites. These have been tentatively classified as Silurian by Mr. Herbert Cox, formerly a geologist on the staff of the New Zealand Geological Survey. Unconformably above this series of Palæozoic rocks lies a considerable thickness of coal-bearing strata—probably Early Tertiary—which consist of limestones, sandstones, grits, and coal-seams. Forming a mantle over much of the district are thick gravel deposits. These usually contain more or less gold, and where reassorted by stream action have afforded some rich bonanzas.

Structurally, the iron-ore appears to occur in a complex anticline composed of banded ferruginous cherts and quartzites. In intimate connection with the cherts is a band of sideritic crystalline limestone, which is often rusty, due to the oxidation of iron-carbonate contained. The width of the actual ore-mass visible on the surface averages not less than 900 ft., though the iron-bearing horizon is much wider. Broken by several gullies filled with glacial *débris*, the ore-body outcrops in a north-westerly and south-westerly direction for nearly a mile and a half from the Parapara Inlet. Beyond this the iron-bearing horizon extends much farther, and contains several deposits of high-grade ore. Mr. George J. Binus, formerly Inspector of Mines for the New Zealand Government, estimates that in the large ore-body near Parapara Inlet there are not less than 51,835,600 long tons of iron-ore in actual outcrop, which could be removed in an open quarry. A conservative estimate made in 1907 by Geological Survey gives the quantity of ore in sight as 22,691,762 tons. In addition to this there is perhaps an equally large quantity of ore some miles to the south in what is known as the Onekaka Block.

The ore is in general a high-grade hydrous hæmatite, botryoidal, mamillary, and often porous in character. Apparently, manganese is a constant constituent. Phosphorus and sulphur are in general low, though there are small quantities of other impurities, principally lime, magnesia, alumina, and some silica. In places the ore contains rounded quartz pebbles, often in sufficient abundance to constitute a highly ferruginous quartz conglomerate. The conglomeratic portion the ore is auriferous, the gold apparently being derived from the same source as that in the quartz pebbles. In depth the quartz pebbles are lacking.

The origin of this extensive deposit of iron-ore is of considerable interest. Briefly stated, the ore has resulted from the concentration of iron-oxide by meteoric waters along the exposed crest of the anticline previously mentioned. The waters derived their burden of iron either directly or indirectly from the oxidation, partly of iron-carbonate, but more especially of the sulphides pyrite and marcasite.

New Plymouth Deposits.—The deposits of iron-ore occurring near New Plymouth, in the North Island, are of a very different character from those at Parapara. They consist of magnetic iron-sands, all more or less titaniferous, which owe their concentration in thick beds along the sea-shore and inland for a mile or more to the action of the waves or wind. Beds of pure black sand of very fine grain are interstratified with beds of feldspathic quartz sand, containing considerable titaniferous magnetite, and with others practically free from iron. Sometimes the demarcation between the various beds is very abrupt and decided, again much more gradual. Considered longitudinally, the beds of pure black sand lense out, and are replaced by others in which the iron constituent is lacking or unimportant, and again the latter beds may

be replaced by pure black sand. The black sand is supposed to consist of an intimate mixture of magnetite and ilmenite. It occurs very widely distributed, and, there can be no doubt, in very large quantities. It appears at very frequent intervals along the coast on either side of New Plymouth, from the mouth of the Waitara River as far south as the mouth of the Patea.

The black sand has apparently been derived in part from the disintegration of hornblende andesites and more basic volcanics—all rich in titaniferous magnetite—and in part from tufa, representing the comminuted equivalent of these volcanics. Volcanics and tufas carrying titaniferous magnetite have a wide distribution near New Plymouth around the volcanic cone of Egmont.

Iron-ores also occur at Table Hill and Mount Royal in Otago, and near Kerikeri (Whangaroa district) and other places in North Auckland.

COPPER.

Ores of copper are found in New Zealand at many localities, but there are no known deposits of any considerable size. Copper mines, however, have been worked from time to time at Kawau and Great Barrier Islands in the Hauraki Gulf, and in the Aniseed Valley, near Nelson. There has recently been discovered a mineralized horizon, containing native copper, malachite, and other ores of copper, near the Kaipara Harbour, in the North Auckland peninsula. The country is but little explored, and the exact nature of the deposit has not yet been investigated.

Perhaps the best-known deposits of ores of copper are in a heavy mineralized zone stretching from D'Urville Island southward to the Aniseed Valley, in the neighbourhood of the Town of Nelson, in the South Island. The ore-bodies lie in small disconnected and generally parallel lenses occurring in serpentine. The most common ore is a cupriferous pyrrhotite, in which the copper-content is generally low. On the surface the oxidation-products—malachite, azurite, chrysocolla, cuprite, and native copper—are occasionally encountered, and in one case (the Champion Mine) are important, giving very rich, though small, bodies above the water-level. Enriched sulphides are to be seen in some of the lower workings of the United Mine above the water-level, though the ore is more or less oxidized on the surface.

GOLD.

In the past most of the gold of New Zealand was derived from placer deposits in various parts of the South Island, but more especially in the districts of Nelson, Westland, and Otago. The bonanzas, in general, occurred where older gravels had been reassorted by fluvial or marine action. The amount of gold derived from this source is now much reduced, and the supply of the precious metal in New Zealand is to a greater extent obtained from quartz reefs. All through the ancient crystalline schists and Palæozoic argillites and gneisses, which form such an important part of the strata of the South Island, quartz veins are common. Generally, these are disposed parallel to the stratification, but are sometimes in fissures transverse to the bedding-planes. Although quartz veins of this class are almost innumerable, many of them contain gold only in traces, and comparatively few yield it in payable quantities. The veins are in rocks which exhibit physiographically mature and sub-mature forms, and in consequence are in general merely the remnant of former veins, the upper and probably richer part having been removed in the extensive and varied denudation—sub-aerial and glacial—which the country has undergone.

At present much the most important centre of quartz-mining in the South Island is at Reefton, where a number of mines are now working—the Globe, the Progress, the Wealth of Nations, the Keep-it-Dark, the Blackwater, &c. The ore filling the veins consists chiefly of quartz. This contains a great deal of pyrites, with more or less stibnite, arsenopyrite, and rarely chalcopryite. In all of the mines the values are irregularly distributed in the quartz gangue, even near the surface, where the yield is usually higher than from the lower levels. Often not only may the ore-shoots terminate within the quartz mass in the direction both of the strike and dip of the vein, but the quartz gangue itself frequently lenses

out and is replaced by comminuted gouge, to reappear either barren or with shoots of rich ore in the continuation of the line of reef. This occurrence of the quartz in patches is one of the most characteristic features of the veins at Reefton. The highest values are almost always along slaty selvages, which are frequently rusty, and where the quartz is of the character known as "magpie stone" by the miners. "Magpie stone" is simply quartz enclosing numerous small angular fragments of argillite of grauwacke, which are the prevailing country rocks of the district.

There is a small reefing-area near the head of the Wilberforce and Ararua Rivers, known as the Westland Reefs district, in which a number of promising auriferous-quartz veins have recently been discovered, but which has been as yet very little prospected. Quartz-mining is carried on at Taitapu, in the Cape Farewell Peninsula, in reefs very much like those at Reefton. Quartz veins are also being worked at Skipper's, Arrowtown, Barewood, and various other places in Central Otago, though none is of important proportions.

The occurrence of the mineral scheelite in many of the quartz veins in Otago is interesting. The quartz with which it is associated is always somewhat auriferous, and in places payably so. The scheelite sometimes appears in a decided band running through the quartz, or again intimately intermixed. At Barewood, Glenorchy, and Macrae's, near Palmerston South, the mineral is found in sufficient quantity to pay for working.

Much more prominent than any of the centres of quartz-mining in the South Island, and of widely different character, are the goldfields of the Hauraki Peninsula of the North Island, which contain the mining centres of Coromandel, Thames, Karangahake, and Waihi, in addition to many less prominent mining localities. The output of gold from Coromandel is now comparatively small. At Thames there is no mine at present date giving large returns, though many rich bonanzas have been discovered in the past. The site of the Waihi Mine—one of the greatest gold-mines of the world—is a centre of immense economic importance as well as of scientific interest. At Karangahake is situated the Talisman Mine, which is now the second gold-producer in New Zealand.

The oldest rocks of the Hauraki Goldfield apparently consist of unfossiliferous argillites and grauwackes, with interstratified igneous rocks, which are followed by argillites, grauwackes, grits, and fine conglomerates, which contain Jurassic fossils. Unconformably above these are early Tertiary rocks containing unimportant coal-seams, which occur as widely separated isolated remnants in the northern part of the Hauraki Peninsula. On the denuded surface of these sedimentaries have been disposed thick and widely distributed volcanic deposits, flows, breccias, and tuffs of andesitic character, above which are others of rhyolitic character. By far the most important veins of the Hauraki Peninsula are in the andesitic flows or in the fine-grained andesitic tuffs. Veins occurring in the coarse andesitic agglomerates and tuffs rarely carry much gold, while those appearing in the rhyolites are decidedly unimportant as compared with those in the andesites. A few relatively unimportant veins are found in the older sedimentary rocks. The andesites are often tremendously altered, especially near the veins. In fact, the rock in places has been changed to a mass of chlorite, sericite, calcite, quartz, and pyrite, giving the so-called propylite. There were evidently at least two periods of vein-deposition, much the more important apparently being the result of the andesite extrusion while the second period of vein-formation succeeded the outpouring of the rhyolites. Sinter-deposits, widely distributed throughout the Hauraki Peninsula, testify to the enormous extent of hydro-thermal activity in the past, and a few scattered hot springs show that it has not yet ceased. The veins are apparently mainly deposits by hot siliceous solutions, carrying a great deal of hydrogen-sulphide in pre-existing fissures, greatly enlarged by replacement of the wall-rock.

Of the payable veins of the Hauraki Goldfields there are two more or less distinct types—those which occur in decided and definite veins, in which the payable ore is contained chiefly in a well-demarcated ore-shoot, with considerable horizontal continuation, and with longitudinal extension from level to level; and those in which not only is the quartz of very irregular width, but the values are almost entirely in small disjointed patches, often of the enormous richness of

"jewellery-shop" ores. Of the former class much the most conspicuous example is given by the more or less connected reefs worked in the Waihi Mine, at Waihi, though the Union, Amaranth, and Silvertown veins at the same place, and the Talisman vein at Karangahake, are of the same class. Of the "jewellery-shop" class of veins, the reef-systems of the Hauraki, Kapanga, Royal Oak, and Tokatea Mines at Coromandel, and the reef-systems of the Kuranui-Caledonian, Moanataiari, and Waitotahi Mines at Thames, are good examples. The bonanzas of free gold in the veins of the Waitotahi type are apparently always at points where the vein is heavily mineralized with pyrite, with which is sometimes associated sphalerite, stibnite, and chalcopyrite, and occasionally native arsenic. The bonanzas frequently have an intimate connection with the faulting of the vein. The faults, formed subsequent to the original period of vein-deposition, may have determined the position of the bonanzas formed during a period of secondary enrichment of the vein, either by acting as barriers to migrating auriferous solutions, or by forming channels along which solutions came, reacting with those in the original vein-channel.

The great Waihi Mine is working on the complex system of branching reefs—the Martha, Welcome, Empire, Royal, Edward, and several smaller veins. Those reefs of the system which approach the surface show an oxidized capping of moderate though not of bonanza richness, which gradually is replaced in depth by sulphide ores. The gold is very rarely visible to the unaided eye, though a considerable portion exists as free gold. One of the most characteristic features of the reefs of the Waihi Mine system is the continuity of the "pay-ore," both in horizontal and vertical extension. If there was any enrichment of these veins subsequent to the original deposition of the quartz, which seems very likely, it was probably by secondary solutions ascending along the reef-channels, excepting near the surface, where descending solutions gave a limited concentration. Some of the veins of the Waihi reef system are of immense size—the Martha reaches a width of 60 ft. on the surface, and at the levels opened at about 800 ft. beneath the surface it is, where widest, over twice that width. It is interesting to note that in general the veins of the Hauraki Peninsula show a diminution in the amount of gold in the electrum in passing from the northern to the southern portion of the field.

Very interesting evidence on the origin of gold and silver in quartz veins is given by certain hot springs in the centre of existing hydro-thermal activity in New Zealand—the Taupo volcanic zone. Sinter taken by the writer from the rim of a very ebullient spring at the Maori settlement of Whakarewarewa was found to contain, on analysis, silver to the amount of 4 oz. and 18 gr. per ton, and gold to the amount of 1 dwt. 4 gr. per ton. The sinter analysed was stained with sulphur, but showed no visible evidence of any sulphides. Analysis made from the sinter deposited in a wooden trough used to conduct water from the same spring at Whakarewarewa gave the following result in the precious metals: Gold, 12 gr.; and silver, 16 dwt. 3 gr. per ton.

The great geyser of Waimangu, which broke into action some years after the terrible Tarawera eruption of 1886, and remained active until November, 1904, deposited a blackish material, consisting chiefly of sulphides, but containing neither gold nor silver. Some mud obtained by Dr. Wohlmann, the Government Balneologist, from a hot spring in the sanatorium grounds at Rotorua gave the following somewhat remarkable analysis:—

Silica	..	..	..	..	..	69.30
Alumina	..	..	..	..	..	4.52
Iron-oxides	..	..	..	..	..	2.00
Titanium-oxide	..	..	..	..	..	0.58
Lime	..	..	..	..	..	1.00
Magnesia	..	..	..	..	..	0.10
Soda and potash	..	..	..	..	..	1.30
Sulphur, combined	..	..	..	..	..	1.40
Sulphur, free	..	..	..	..	..	6.09
Organic matter	..	..	..	..	..	10.01
Water	..	..	..	..	..	3.70
						100.00

Microscopic examination of the deposit showed that it consisted mainly of quartz and amorphous silica, with a little feldspar. The mud also contained 5 gr. of gold and 6 dw. 1 gr. of silver per ton. It is evidently not a deposit from the spring, but is merely a siliceous tufa impregnated by the thermal solutions.

PLATINUM.

Platinum has been found at many points in the South Island in the alluvial drifts, but never in sufficient quantities to be of any economic value, excepting where saved with gold. Platinum has been reported from the Queen of Beauty quartz reef at Thames, and also from an occurrence of massive pyrites at Coromandel. In 1906 a number of platiniferous quartz veins were discovered by the Geological Survey near the Teremakau River, in the district of Westland, in the South Island, in close proximity to sheets of altered magnesian eruptives—apparently originally dunite, and situated parallel to the stratification of the enclosing phyllites. The quartz is somewhat vitreous, and in general very “hungry” in appearance. Iron-pyrite and iron-oxides derived from its alteration are fairly common. In three analyses made of the platiniferous quartz the platinum was found to occur associated with silver, and always in the approximate ratio of 7 parts of silver to 1 of platinum. The following is a characteristic result, showing the amount of platinum and silver: Platinum, 3 dw. 8 gr.; and silver, 1 oz. 4 dw. 9 gr. per ton. It seems possible that the platinum and silver may exist in some mineralogical combination, though no data were obtained to substantiate this hypothesis.

An interesting product of metamorphism of the magnesian eruptives, near which the platinum-veins just described occur, is the mineral nephrite—the much-valued *pounamu* of the Maoris, and the precious “greenstone” of commerce. This mineral, which is apparently a massive actinolite or allied amphibole, occurs as segregations from a few inches to several feet in width in a talcose matrix—also a product of alteration of the magnesian eruptives. Many analyses made of the magnesian eruptives failed to show any platinum actually existing in them.

TIN, ETC.

Cassiterite has been found in the form of “stream-tin” in some of the streams amid the rugged hills of Stewart Island, and has been reported to occur actually *in situ* in granite.

Ores of antimony, lead, zinc, and several other metals have been discovered in New Zealand, but scarcely in sufficient quantity to deserve especial mention in this place.

Much of the wild, mountainous country of the South Island, and the thickly wooded central and northern parts of the North Island, are still unexplored, and vast mineral wealth may yet be discovered in these areas of *terra incognita*.

SECTION XV.—LABOUR LAWS.

The legislation passed by the General Assembly of New Zealand prior to 1908 and termed the "labour laws" was consolidated in that year. A complete schedule of the Acts now in force relating to conditions of labour is given below, together with those statutes now repealed and incorporated in the existing laws :—

Acts in Force.	Acts Consolidated.
Accident Insurance Companies Act, 1908	Accident Insurance Companies Act, 1902.
Banking Act, 1908 (extracts)	Bank Holidays Act, 1902.
Bankruptcy Act, 1908 (sections 112 and 120, <i>re</i> wages of employees)	Bankruptcy Act, 1892 (sections 112 and 120).
Coal-mines Act, 1908 (extracts) ..	Coal-mines Compilation Act, 1905.
Coal-mines Amendment Act, 1908.	
Coal-mines Amendment Act, 1909 (extracts).	
Coal-mines Amendment Act, 1910 (section 5 (1)).	
Companies Act, 1908 (sections 1 and 249, <i>re</i> wages of employees of companies that are being wound up)	Companies Act, 1903 (sections 1 and 249).
Crimes Act, 1908 (sections 89 and 168, <i>re</i> conspiracy in trade disputes, <i>re</i> masters and apprentices)	Conspiracy Law Amendment Act, 1894; Criminal Code Act, 1893 (sections 150 and 213).
Deaths by Accidents Compensation Act, 1908	Deaths by Accidents Compensation Act, 1880; Legitimation Act, 1894 (section 6).
Exhibitions Act, 1910 (section 9 (1a) and (2)).	
Factories Act, 1908	Factories Act, 1901; Factories Amendment Act, 1905; Factories Act Amendment Act, 1906; Factories Act Amendment Act, 1907.
Factories Amendment Act, 1910.	
Industrial Conciliation and Arbitration Act, 1908	Industrial Conciliation and Arbitration Acts Compilation Act, 1905.
	Industrial Conciliation and Arbitration Amendment Act, 1905; Industrial Conciliation and Arbitration Amendment Act, 1906.
Industrial Conciliation and Arbitration Amendment Act, 1908.	
Industrial Conciliation and Arbitration Amendment Act, 1910.	
Inspection of Machinery Act, 1908 ..	Inspection of Machinery Act, 1902; Inspection of Machinery Act Amendment Act, 1903.
Inspection of Machinery Amendment Act, 1908.	
Judicature Act, 1908 (section 100, <i>re</i> accidents compensation)	Accidents Compensation Act, 1901.

Acts in Force.	Acts Consolidated.
Kauri-gum Industry Act, 1908 ..	Kauri-gum Industry Act, 1898; Kauri-gum Industry Act Amendment Act, 1899; Kauri-gum Industry Amendment Act, 1902; Kauri-gum Industry Amendment Act, 1903.
Kauri-gum Industry Amendment Act, 1910.	
Labour Department and Labour Day Act, 1908	Labour Day Act, 1899; Labour Department Act, 1903.
Land for Settlements Act, 1908 (section 16)	Land for Settlements Consolidation Act, 1900 (section 13).
Land for Settlements Administration Act, 1909 (section 9)	
Legislature Act, 1908 (section 123, <i>re</i> holiday on election day)	Electoral Act, 1905 (section 115).
Licensing Act, 1908 (extracts) ..	Licensing Act, 1881 (section 13); Alcoholic Liquors Sale Control Act Amendment Act, 1895 (section 10).
Licensing Amendment Act, 1910 (section 36).	
Magistrates' Courts Amendment Act, 1909 (section 7).	
Master and Apprentice Act, 1908. (See also Crimes Act, section 168)	Master and Apprentice Act, 1865.
Mining Act, 1908 (extracts) ..	Mining Act Compilation Act, 1905; Mining Act Amendment Act, 1905.
New Zealand State-guaranteed Advances Act, 1909, sections 59 to 63, Advances to Workers.	
New Zealand State-guaranteed Advances Amendment Act, 1910 (section 11).	
Phosphorous Matches Act, 1910.	
Police Offences Act, 1908 (sections 1 and 24, <i>re</i> combinations affecting supply of light or water	Conspiracy Law Amendment Act, 1894.
Public Contracts and Local Bodies' Contractors Act, 1908 (extracts)	
Public Holidays Act, 1910 (sections 3 and 5)	Public Contracts Act, 1900.
Scaffolding Inspection Act, 1908 ..	Scaffolding Inspection Act, 1906; Scaffolding Inspection Act Amendment Act, 1907.
Servants' Registry Offices Act, 1908 ..	Servants' Registry Offices Act, 1895.
Shearers' and Agricultural Labourers' Accommodation Act, 1908	Shearers' Accommodation Act, 1898; Agricultural Labourers' Accommodation Act, 1907.
Shipping and Seamen Act, 1908 (extracts)	Shipping and Seamen Act, 1903; Shipping and Seamen Act Amendment Act, 1905.
Shipping and Seamen Amendment Act, 1909 (extracts).	
Shipping and Seamen Amendment Act, Act, 1910 (section 2).	
Shops and Offices Act, 1908 ..	Shops and Offices Act, 1904; Shops and Offices Act Amendment Act, 1905; Shops and Offices Act Amendment Act, 1907.

Acts in Force.	Acts Consolidated.
Shops and Offices Amendment Act, 1910.	
Trade-unions Act, 1908	Trade-union Act, 1878; Trade-union Act 1878 Amendment Act, 1896.
Wages Protection and Contractors' Liens Act, 1908	Contractors' and Workmen's Lien Act, 1892; Threshing-machine Owners' Lien Act, 1895; Truck Act, 1891; Wages Attachment Act, 1895; Wages Protection Act, 1899; Workmen's Wages Act, 1893.
Workers' Compensation Act, 1908 ..	(This Act amends and repeals the Consolidated Act of 1908.)
Workers' Compensation Act Amendment, 1909.	
Workers' Dwellings Act, 1910 ..	Repealing the Workers' Dwellings Act, 1908 (consolidated).

The most important of the labour laws both as affecting the employment of labour and from the economic point of view is the Industrial Conciliation and Arbitration Act which was first passed in 1894; since that date it has been amended from time to time as new difficulties arose. The Act, comprising one of the statutes consolidated in 1908, now stands as the Industrial Conciliation and Arbitration Act, 1908, with amending Acts of 1908 and 1910, to be read with the principal Act. The main provisions are now as follows:—

Industrial Districts.—Under the regulations to the Act the Dominion of New Zealand is divided into eight industrial districts.

Registration of Industrial Unions and Associations.—Any society consisting of not less than three persons in the case of employers or fifteen in the case of workers in any specified industry or industries in an industrial district may be registered as an industrial union on compliance with the requirements for registration. Any incorporated company may also be registered as an industrial union of employers. Any two or more industrial unions of either employers or workers in any industries may form an industrial association, and register the same under the Act. Industrial Associations are usually formed for the whole or greater part of New Zealand, comprising the unions registered in the various industrial districts. Such registration enables any union or association—(1) To enter into and file an industrial agreement specifying the conditions of employment agreed upon. This agreement (which is binding only on the parties to it), although required by the Act to be limited to a period of not more than three years, remains in force until superseded by another agreement or an award of the Court of Arbitration, except where the registration of the union of workers concerned is cancelled. (2) In the event of failure to arrive at an industrial agreement, to bring an industrial dispute before a Council of Conciliation set up for the purpose, and, if necessary, before the Court of Arbitration. (The constitution of Councils of Conciliation and of

the Court of Arbitration is explained later in this article.) A Council of Conciliation has no compulsory powers; it merely endeavours to bring about a settlement. If a settlement is effected it may be filed as an industrial agreement. In most cases, however, it has been found that on arriving at a settlement through the Council of Conciliation the parties prefer to have the agreement made into an award of the Court of Arbitration, and in such cases the dispute is formally passed on to the Court for that purpose. If a complete settlement is not arrived at, the Council is required by the Act to refer the dispute to the Court of Arbitration, which, after hearing the parties, may make an award, and any items of the dispute that have been agreed upon before the Council may be embodied by the Court into its award without any further reference. Such an award is, like an industrial agreement, binding on all the parties concerned, and is also binding on any other employers subsequently commencing business in the same trade in the district covered by it. Unless the district is further limited by the Court in the award, the award applies to the industrial district in which it is made. Pending the sitting of the Court of Arbitration to hear the dispute, it is the duty of the Council to endeavour to bring about some provisional agreement. Awards are also required by the Act to be limited to a period of not more than three years, but, nevertheless, remain in force until superseded by either another award or by a subsequent agreement, except where registration of the union of workers has been cancelled.

Under the previous Act power was given to any of the parties to a dispute when once filed for hearing by the Board of Conciliation set up under that Act for the district to refer the same to the Court of Arbitration direct without waiting for a hearing by the Board. This provision is now repealed, and the dispute must be heard by a Council of Conciliation before being referred to the Court of Arbitration.

Registration also enables a union or association to cite any party committing a breach of an award or industrial agreement before a Magistrate. Parties generally prefer, however, to hand over any such cases to one of the Inspectors of Awards appointed for the purpose.

Under the Act individual employers have the same powers as unions or associations of citing other parties, although they do not exercise those powers.

Constitution of Conciliation Councils.—The Act provides for the appointment of not more than four Conciliation Commissioners to hold office for three years; three have been appointed and each of the eight industrial districts is placed under the jurisdiction of one of them.

When a dispute arises the union, association, or employer concerned notifies the Commissioner in the form provided, stating the nature of the dispute, the names of the respondents, and

recommending, at its option, one, two, or three assessors to act as representatives on the Council to be set up. On receipt of the application the Commissioner notifies the respondents and calls upon them to similarly recommend an equal number of assessors to represent them. The assessors must, except in special cases at the discretion of the Commissioner, have been engaged in the industry. Councils of Conciliation are thus set up for each dispute as it arises.

Constitution of the Court of Arbitration.—The Court of Arbitration is appointed for the whole of New Zealand, and consists of three members, one of whom, the permanent Judge of the Court, possesses the same powers, privileges, &c., as a Judge of the Supreme Court. Of the other members, one is nominated by the various unions of employers throughout the Dominion, and one by the unions of workers, and their appointments are determined by a majority of the unions on each side respectively. Like the members of the old Boards of Conciliation they hold office for three years, and are eligible for reappointment. The Judge and one member constitute a quorum. All decisions of the Court are arrived at by the judgment of a majority of the members present at the sitting, or, if those members present are equally divided in opinion, the decision of the Judge is final. The Court has full power to deal with questions brought before it, and, except in the case of matters which may be ruled to be beyond the scope of the Act, there is no appeal from its decision.

Strikes and Lock-outs.—Except in special industries (see below) a strike or lock-out is illegal only if the parties concerned are bound by an award or agreement. If a strike takes place in any industry, each worker who is a party to the strike, and who is bound by an award or agreement, is liable to a penalty not exceeding £10, and in case of a lock-out each offending employer is liable to a penalty not exceeding £500. For inciting, instigating, aiding, or abetting an unlawful strike or lock-out, or its continuance, a worker is liable to a penalty of £10, and a union, association (of employers or workers), or an employer, £200. A gift of money or other valuable thing for the benefit of a party or union engaged in a strike is deemed to be aiding or abetting. There are special provisions in the case of strikes and lock-outs in industries affecting the supply of the necessities of life, such as water, milk, meat, coal, gas, or electricity, or in the working of any ferry, tramway, or railway used for the public carriage of goods or passengers. In these industries, whether affected by an award or agreement or not, fourteen days' notice must be given within one month of an intended strike or lock-out, failing which each worker concerned is liable on summary conviction before a Magistrate to a maximum fine of £25 or an employer to a maximum fine of £500. The maximum penalty for inciting, aiding, or abetting in these cases is £25 for a worker and £500 for an employer or a union or association. Strikes and lock-outs are forbidden during the hearing of a dispute by the Council or the Court of Arbitration.

A strike is now defined as the act of any number of workers who are, or have been, in the employment, whether of the same employer or of different employers, in discontinuing that employment, whether wholly or partially, or in breaking their contract of service, or in refusing or failing after any such discontinuance to resume or return to their employment, the said discontinuance, breach, refusal, or failure being due to any combination, agreement, or common understanding, whether express or implicit, made or entered into by the said workers with intent to compel or induce any employer to agree to terms of employment, or comply with any demands made by workers, or with intent to cause loss or inconvenience to any such employer in the conduct of his business, or with intent to incite, aid, abet, instigate, or procure any other strike, or with intent to assist workers in the employment of any other employer to compel or induce the employer to agree to terms of employment, or comply with any demands made upon him by any workers. A similar definition is, *mutatis mutandis*, given to a lock-out.

Breaches.—Breaches of awards and industrial agreements are punishable as follows: A union, association, or employer by fine not exceeding £100 for each breach; a worker by fine not exceeding £5 for each breach. Penalties are recoverable at the suit of either an Inspector of Awards, or any party to the award or agreement by action in a Magistrate's Court, but there is a right of appeal to the Arbitration Court. Actions for the recovery of penalties must be commenced within six months after the cause of action has arisen.

The Factories Act, 1908, is another consolidation of former legislation. It is now to be read in conjunction with its amendment of 1910. The Acts passed prior to 1901 dealt almost exclusively with the protection of working women and girls and boys; but the consolidated law takes cognisance also of the working-hours of men, and arranges for due payment of overtime work. The eight-and-a-quarter hour day and the forty-five hour week, with restricted overtime, which must be paid for, is insisted on for women and boys, except in woollen-mills, where forty-eight hours per week are allowed. If men are employed over eight hours and three-quarters per day or forty-eight hours in the week, overtime rates must be paid, and the amount of overtime is limited. The hours fixed for men are, however, subject to an award of the Arbitration Court. The wages of young persons, the statutory holidays (without deduction of wages therefor), the regulated hours of overtime, the sanitation and hygiene of factories, provision of fire-escapes, drinking-water, &c., are all carefully arranged for under this Act. The statutory half-holiday is fixed for Saturday, but may be altered to the day observed for shops on the carrying of a poll of the electors of the local district. Under the 1910 amendment further protection is afforded to young persons in regard to non-deduction

from the week's wages. In order to prevent unfair competition on the part of Chinese and other laundry proprietors the restrictions as to working-hours in laundries is extended by the amendment to cover proprietors as well as employees. "Sweating" has almost disappeared in New Zealand through the restriction of subcontracts in the issue of textiles to be made up into garments.

Any establishment wherein two or more persons work to produce articles intended for sale is a factory in New Zealand. All bakehouses, all laundries, all places wherein Asiatics are employed, and where machinery is used, are also factories, even if only one person is employed therein. This low limit is made mainly for the purpose of inspection, in order that the public should not be injured by tainted food or by clothing manufactured in filthy surroundings.

The Factories Act is probably one of the most complete and perfect laws to be found in the statute-book of any country.

The Shops and Offices Act, 1908, is a consolidation of the Shops and Offices Act, 1904, with the amending Acts of 1905 and 1907. It is the result of legislative growth on the Shops and Shop-assistants Act, 1892. There is also an amending Act of 1910. The Act regulates the hours of assistants in shops, not allowing them to exceed fifty-two hours a week or more than nine hours a day, with the exception of eleven hours on one day in the week, and overtime under warrant from the Inspector; overtime to be paid for. The shops are to be kept clean and well ventilated; certain sanitary conditions must be observed when persons of different sexes are employed in the same establishment. A weekly half-holiday is compulsory, the day to be chosen in each local district by the local authority, except where it is fixed by a poll of the electors. Compulsory closing of shops at any hour on other days is not insisted on, except that each trade in any district may fix a closing-hour by a majority vote, or the closing of all shops in any district may be effected by a majority vote of all shopkeepers. To all young persons wages of 5s. a week must be paid as a minimum, with an annual increase of 3s. per week until £1 is reached. Overtime must be paid for in both shops and offices, but some offices, such as banks and shipping offices, are exempt. Under the 1910 amendment all assistants employed in hotels and restaurants are brought under special provisions as to hours, holidays, &c. The hours are ten per day, and from fifty-two to sixty-two per week. A feature of the holiday provisions is that the half-holidays may by mutual agreement be accumulated for three months, when a full week's holiday must be given. A wages and time book, as for factories, is now compulsory in all shops, including hotels and restaurants.

The Employers' Liability Acts, which were designed to protect workers from accident arising through negligence, &c., on the part of employers or their agents, were repealed by the Workers' Compensation Act, 1908. It had been found that little practical

advantage accrued to injured workers or their families under the Liability Acts, as most industrial accidents have nothing to do with negligence or shortcomings of employers; such accidents are the outcome of risks incidental to every branch of enterprise and manufacture. The Workers' Compensation Act does not imply a fault on the part of any individual. It provides for compensation for injury or death in the case of any accident occurring in the course of the worker's employment, so that the hardships necessarily ensuing in case of injury may be minimized to the sufferer, or, in case of his death, to the family through the loss or disablement of the breadwinner. By means of the Workers' Compensation Act, the burden of industrial accident is borne by the profits of the business in which the accident occurred. To meet the difficulty of too great expense falling suddenly on an employer through his being called upon to pay large compensation for accident, provision is made by the Government Accident Insurance Act, 1908, and by a State Department which insures employers against risk. There are also several private insurance companies which undertake these risks, and are regulated in some degree by the Accident Insurance Companies Act, 1908. The Workers' Compensation Act allows compensation up to £500 in case of death, according to the extent to which the relatives are dependent for support. In the case of total or partial incapacity the compensation payable is half-wages, with a limit of £500, or six years' payments. In addition to the payment during incapacity, the second schedule to the Act fixes a specific payment for the loss of certain limbs and organs of the body, thus: "Total loss of a leg, 75 per cent. of full compensation as for total incapacity; total loss of forefinger of the right hand, 20 per cent.," &c. "Contracting out" is permitted—that is to say, another scheme of compensation may be substituted for those in the Act if it has been approved by the Arbitration Court; the Deaths by Accident Compensation Act, 1908, and the Judicature Act, 1908, also bear on the subject of compensation.

The Wages Protection and Contractors' Liens Act, 1908, is a consolidation of statutes previously known as the Truck Act, 1891; the Contractors and Workmen's Lien Act, 1892; the Workmen's Wages Act, 1893; the Threshing-machine Owners' Lien Act, 1895; the Wages Attachment Act, 1895; and the Wages Protection Act, 1899. The consolidated Act guards the interest of workers in the following directions:—

- (1.) It insures the regular payment of wages.
- (2.) It permits attachment of moneys in hand of employers when wages are in arrears.
- (3.) It prohibits attachment of a worker's wages except in the case of any surplus exceeding £2 per week. (This, however, has been affected by section 20 of the Industrial Conciliation and Arbitration Amendment Act, 1908, under which, in the case of a penalty for a breach of that Act, the surplus above £1 per week earned by

unmarried men may be attached by judgment in the Magistrate's Court.)

(4.) It prohibits payment for wages being made in goods (truck) or in any other way than in money or by approved cheque.

(5.) It entitles a contractor, or subcontractor, or worker to a lien on the lands or chattels of his employer upon giving due notice, and the employer must then retain in his hands sufficient of the contract-moneys to satisfy and guarantee payment of the claimant's dues.

(6.) If the cost of threshing a crop is not paid to the workers employed in threshing it, the cost of threshing can be made a charge on the proceeds of the realization of such crop.

(7.) No deduction from workers' wages may be made for purposes of insurance against compensation for accident.

Liens to be imposed as security for miners' wages or earnings are dealt with under the Mining Act, 1908, and the Coal-mines Act, 1908.

The Public Contracts and Local Bodies' Contractors Act, 1908 (extracts from), provides that in every contract let by a public body, such as His Majesty's Government, an Education Board, Harbour Board, municipality, &c., the contractor must observe such length for the working-day, and pay such rates to his employees for wages, overtime, holidays, &c., as are generally considered usual and fair in that locality, or as fixed by the Court of Arbitration for the industrial district, whether the contractor is or is not a party to the award.

Priority of payment for wages or salaries in preference to other debts is insured by the Companies Act, 1908, in the event of the winding-up of a company.

The Shearers' and Agricultural Labourers' Accommodation Act, 1908, authorizes the inspection of shearing-sheds and homesteads on farms, runs, and stations throughout the Dominion. Proper sleeping and dining accommodation, ventilation, sanitation, &c., must be provided both for the wandering workmen utilized during the early summer as shearers, and for the farm-assistants employed the whole year round. If no provision is made, or if the accommodation is insufficient, formal notice may be served on the owner or occupier in regard to the improvements to be effected, and, if the notice is disregarded or not fully complied with, the offender can be brought before a Magistrate for enforcement of the notice.

The licenses of registry offices for domestic or farm servants are regulated by the Servants' Registry Offices Act, 1908. This Act prevents friendless or uneducated servants from becoming the prey of unscrupulous persons so far as engagements for employment, &c., are concerned. Applicants for licenses as registry-office keepers pay a small fee to the Government, and must present a certificate of good character. Proper ledgers and account-books, open to inspection, must be provided. Registry-office keepers are not allowed to keep lodgings for servants, or have any interest in such houses.

The Inspection of Machinery Act makes provision for the inspection of all steam boilers and digesters, hydraulic, electric, and other lifts, and of any prime mover such as gas, oil, and air engines used to drive machinery on land, also of machinery used on vessels afloat that are not self-propelled.

It also provides for the issue of certificates to those who pass the prescribed examination for land engineers and engine-drivers in charge of machinery, for winding-engine drivers for mining purposes, drivers employed on locomotives working on railway-lines not under the control of the Government Working Railways Department, and for the drivers of traction engines on roads. The issue of these certificates is controlled by a Board of Examiners set up by the Act, the Chairman being the Chief Inspector of Machinery.

The Labour Department and Labour Day Act, 1908, defines the statutory existence of the Labour Department. The duties of that Department are to administer the labour laws, and to furnish information on all industrial matters, while power is given to certain of its officers to collect statistics with the authority wherewith a Crown Commissioner is invested. "Labour Day" is a public holiday, fixed as being the fourth Monday in October of each year.

The Master and Apprentice Act, 1908, applies mainly to the indenturing of young persons to employers. Special sections of the Act apply to the punishment of apprentices for absenting themselves from duty, and to the fine of a master for neglecting or ill-using his apprentice. This Act is, however, somewhat obsolete, and the employment of apprentices is now largely controlled by the awards and agreements under the Industrial Conciliation and Arbitration Act.

The Crimes Act, 1908, in some sections relates to the proper care of apprentices by their masters; but this Act also refers to the position of legal and illegal combinations for trade purposes, and thus partly supersedes the Conspiracy Law Amendment Act, 1894. The real position of combinations among employers or workmen in restraint of trade, however, is more effectively dealt with by the Industrial Conciliation and Arbitration Amendment Act, 1908.

The Trade-unions Act, 1908, although unrepealed, is not largely availed of, because most of the trade-unions have become industrial unions under the Arbitration Act, the few remaining on the Trade-union Register continuing to do so mostly on account of having friendly society benefits under their old rules.

The Police Offences Act, 1908, also contains certain restrictive measures dealing with conspiracy in regard to supply of light and water.

The Scaffolding Inspection Act, 1908, gives power for the appointment of Inspectors to examine scaffolding and gear used in the erection or repair of buildings, ships, &c., and to see that all due precaution is used for the prevention of accidents, and to insure safety of workers' lives and limbs.

The Workers' Dwellings Act, 1910, makes provision for setting apart Crown Land, or acquiring private land, and for the erection of dwellings for workers thereon. The purchase of a dwelling is effected by a deposit of £10, and the payment of the balance in instalments ranging over twenty-five years and a half. Under this system workers are enabled to secure their own houses by the payment of what amounts to only a fair rent, there being a considerable saving of expense in interest, in the cost of land, and erection of the dwellings in convenient groups, in a minimum of legal charges, &c., while the dwellings are erected to suit the requirements of the workers concerned, they are thoroughly up to date in design, and at the same time they show no indication of a "brand." Workers' dwellings may also be disposed of on lease and tenancy. A "worker" under the Act is one whose earnings do not exceed £175 per annum, and who is landless.

The Advances to Workers Acts are now merged in the New Zealand State-guaranteed Advances Act, 1909.

SHIPPING AND SEAMEN.

Shipping and Seamen Act, 1908.

The law relating to shipping and seamen is contained in the Shipping and Seamen Act, 1908, and the Shipping and Seamen Amendment Act, 1909, and the following are the principal provisions of those Acts:—

A foreign-going ship is required to carry two certificated mates instead of one. Home-trade steamships of 60 tons register and upwards, and home-trade cargo sailing-ships of 100 tons register, must carry certificated mates, and such ships of 100 tons register and upwards trading more than 300 miles between terminal ports must have second mates.

Foreign-going certificated second mates are entitled to ship as mates in the home trade, and all candidates for certificates are to be British subjects.

Any master or mate may, at any time, be required by the shipowner or by the Minister to be examined in the sight tests by Government Examiners.

No person is to be licensed to procure seamen, who are in future to be procured through the shipping offices, or by the masters, mates, engineers, owners, or the *bona fide* servants of the owner in his constant employment.

The engagement and discharge of whole crews of home-trade ships are to be effected before Superintendents of Mercantile Marine.

Desertion is defined, and deserters who cannot be dealt with before their ship sails can afterwards be prosecuted by the owner or agent, and copies of the agreement and of entries in the log-book are to be accepted by Courts as evidence. Forfeited wages are to be paid into the Public Account instead of to the shipowner.

Masters and officers who assault seamen on the high seas are made liable to imprisonment or fine.

The clearances of foreign-going ships which are required to pay the coastal rate of wages are to be withheld until such wages are paid.

Intercolonial, in addition to home-trade ships, are made liable to pay the wages, maintenance, and medical expenses of seamen taken ill in the service of the ship for the remainder of the agreement, not exceeding three months, and, in the case of intercolonial ships, if the agreement expires within one month from the commencement of the illness, payment is to be made for one month after the expiry. The illness which is to entitle a man to the benefits provided for, is one which requires medical treatment for fourteen days.

Provision is made for a Registrar of Seamen, who is to keep a record of the services of all seamen. Engine-room logs are to be kept on steamers which carry not less than two engineers.

Power is given to the Minister to define restricted limits for steamers and vessels propelled by oil, gas, &c.

The adjustment of compasses is to be carried out under regulations made by the Marine Department. Power is given to the Governor in Council to make regulations as to the loading and stowage of ballast, and the loading of grain cargo in bulk. It is made an offence to ship wool, flax, tow, or skins in such a condition as to be liable to spontaneous combustion.

The law as to inquiries into shipping casualties has been remodelled on the lines of the Imperial Merchant Shipping Act, and provision is made for rehearings, for Superintendents of Mercantile Marine taking part in such inquiries, for Magistrates ordering a change of venue, that the inquiries are not to be held in Police Courts unless other suitable buildings are not available; and that, in cases where there has been loss of life, but no injury to the ship, the inquiries may be held by Coroners.

Alteration is made as to the liability of shipowners as regards cargo lost, and they are authorized to make special freight-charges for valuables. Provision is made against owners inserting certain clauses in bills of lading exempting themselves from liability for damage to cargo.

Provision is made for the registration of New Zealand ships by incorporating into our law certain of the provisions of the Imperial Merchant Shipping Act.

Intercolonial ships are exempted from the necessity of carrying a doctor.

Provision is made for issuing certificates of competency to second mates of home-trade ships, and for recognizing as valid in the Dominion certificates of competency as skipper of fishing-boats, granted by the Board of Trade.

Intercolonial and home-trade agreements are to be transmitted to a Superintendent of Mercantile Marine within twenty-one days of their expiration.

It is declared to be an offence for the master or owner of a ship to engage a certificated officer for the purpose only of enabling a ship to clear, and not for the purpose of making the voyage.

Shipping and Seamen Act, 1909.

This Act was reserved for the assent of His Majesty the King, and will not therefore come into force until after notification of such assent is received. The Act embodies several of the provisions of the Imperial Merchant Shipping Act, 1906, gives effect to certain of the resolutions of the Colonial Merchant Shipping Conference held in London in 1907, and makes amendments in the Act of 1908 in other directions which experience has shown to be necessary.

The main provisions of the Act are as follows :—

The definition of "home trade" is altered; provision is made for recognizing certificates of masters, mates, and engineers granted in any part of the British Dominions, and certain other alterations as regards certificates are made.

It is made unlawful for any person other than the owner, master, mate, or engineer of a ship, or a Superintendent of Mercantile Marine, to engage or supply seamen for ships, and only such seamen as have a knowledge of the English language are to be allowed to ship. The period of service for the rating of A.B. is reduced, and training-ships are allowed to carry less able seamen than required in the case of ordinary ships, apprentices being allowed to take their place to a certain extent.

British foreign-going ships of not less than 1,000 tons gross register are to carry certificated cooks, and the space provided for seamen is increased. Sanitary, hospital, and lavatory accommodation, including bathrooms, with an adequate supply of hot water for the crew employed in connection with the engines, is to be provided.

Where a seaman receives an advance note or an advance in cash, and having negotiated the note, or having received the cash, wilfully or through misconduct fails to join his ship, or deserts before the note becomes payable, he is liable to fine or imprisonment; and in any case of desertion power is given to the Minister to withhold a seaman's discharge for such period as he thinks fit.

Under the Act of 1908 boats propelled by mechanical power other than steam which are under 5 tons register are exempt from carrying certificated officers; this exemption is done away with, and provision is made that such boats, up to 6 tons register, when carrying passengers or plying for hire, are to carry either a certificated master or engineer.

In cases where restricted limits are reduced, provision is made to enable masters and engineers to continue to act in their respective capacities within the old limits; and special provision is also

made for fixing the load-lines of all ships employed in river and extended river limits and all home-trade ships under 20 tons register carrying cargoes of sand, shingle, gravel, cement, or other dead weight.

In the case of ships over 25 tons gross tonnage built in New Zealand, after the Act comes into operation plans and specifications are to be submitted to the Minister for approval before the construction is commenced.

Provision is made for the inspection of wool, flax, tow, skins, and other goods liable to spontaneous combustion before shipment on any foreign-going ship.

INDUSTRIAL CONCILIATION AND ARBITRATION.

Arbitration Court.

The work of the Court during the year ended 31st March, 1911, may be summarized as follows:—

Work of the Court of Arbitration, 1910-11.

Cause.	Number of Cases.
Awards made	74
Enforcement of awards (cases conducted by Labour Department)	5
Interpretation of awards	33
Other decisions (amending awards, adding parties, &c.) ..	43
Appeals from decisions of Stipendiary Magistrates in enforcement cases	7
Applications for awards refused	2
Cases under the Workers Compensation Act	24

The following is the number of cases brought before Magistrates during the year ended 31st March, 1911:—

Cause.	Number of Cases.
Enforcement of awards	539
Enforcement of the law <i>re</i> strikes	68
Enforcement of the law <i>re</i> lock-outs	1

Of 519 cases for breaches of awards in which the proceedings were taken by the Labour Department, 453 were decided in favour of the Department, and sixty-six were dismissed. Of twenty cases conducted by unions, fourteen convictions were recorded, and six cases were dismissed.

Councils of Conciliation.

Up to the 31st March, 1911, the number of industrial disputes brought under the notice of the Commissioners was eighty-seven. Sixty-five disputes were settled by mutual agreement, fourteen were partly settled, and eight were referred to the Arbitration Court.

Industrial Disputes dealt with by Conciliation Commissioners and Councils during the Year ended 31st March, 1911.

District.	Total Number of Disputes dealt with.	Number of Disputes.		
		Fully settled.	Partially settled.	Wholly re- ferred to the Arbitration Court.
Northern and Taranaki ..	26	17	7	2
Wellington, Nelson, Marl- borough and Westland	25	19	5	1
Canterbury and Otago and Southland	36	29	2	5
Totals	87	65	14	8

Partial settlements represent cases in which there was failure to agree on one or more of the points in dispute, and these undecided questions were referred to the Arbitration Court for judgment. The cases wholly referred to the Court are those in which no agreement could be arrived at.

Cost of Administration.

The cost of administration of the Act by the Arbitration Court and Councils of Conciliation during the year 1910-11 was £6,842, made up as follows:—

	£
Salaries of members of Arbitration Court	2,800
Salaries of Conciliation Commissioners	1,500
Salaries of Arbitration Court officers.. ..	150
Fees paid to Assessors, Councils of Conciliation ..	948
Travelling, &c., expenses of Arbitration Court ..	1,098
Travelling, &c., expenses of Conciliation Commissioners	177
Travelling, &c., expenses of Conciliation Assessors ..	169
	£6,842

INDUSTRIAL UNIONS.

Returns of the number and membership of industrial unions of employers and workers are compiled for the calendar year. The number under each heading on 31st December of each year from 1900 to 1910 inclusive is shown in the following table:—

NUMBER OF UNIONS, AND MEMBERSHIP, 1900-10.

Year.	Employers.		Workers.	
	Unions.	Membership.	Unions.	Membership.
1900	43	1,016	191	17,989
1901	68	1,824	220	23,768
1902	84	2,497	232	23,816
1903	103	3,000	258	27,640
1904	109	3,292	273	30,271
1905	113	3,276	261	29,869
1906	109	3,337	274	34,978
1907	121	3,630	310	45,614
1908	122	3,918	325	49,347
1909	120	3,702	308	54,519
1910	118	4,262	308	57,091

Figures relating to membership and to number of unions are not available prior to this date.

During the year 1910 it will be seen that there has been an increase of 560 members in employers' unions and 2,572 in workers' unions. The actual number of unions on the register has remained stationary in regard to workers, and there has been a decrease of two in regard to employers.

The roll of membership of industrial unions of workers has increased by 22,130 members during the last five years.

In the following table the unions are shown in trade-groups, with their respective increases during the period of seven years from 1903-10:—

Membership of Unions in Trade-groups, 1903 and 1910.

Trade.	Number of Members.		
	1903.	1910.	Increase per Cent. over Figures for 1903.
Agriculture	1,235	4,142	235·4
Building	3,717	6,857	84·2
Clothing and textile	3,158	4,717	49·4
Engineering and shipbuilding	1,441	3,383	134·8
Food supply	2,297	7,357	220·3
Mining	4,145	4,689	13·1
Printing	708	1,163	64·2
Transport	7,749	17,104	120·8
Other trades	3,190	7,679	140·7
Totals	27,640	57,091	..
Increase of unionists	..	29,451	106·6

The following statement giving particulars as to all strikes which have occurred in New Zealand since the inception of the Industrial Conciliation and Arbitration Act has been prepared by the Labour Department, and is now published for the first time :—

SUMMARY OF STRIKES IN NEW ZEALAND SINCE INCEPTION OF INDUSTRIAL CONCILIATION AND ARBITRATION ACT (1894) TO 31ST MARCH, 1911.

Number of strikes coming within scope of the Act	..	20
Number of strikes outside the Act	..	22
Total number of strikes	..	*42
Number of disputes included in total which may be classed as trivial or unimportant	..	20
Men fully successful in	.. (cases)	13
Employers successful in	..	6
Compromise effected in	..	23
Average duration of all strikes (trivial cases not included), (days)		10
Total number of strikers (trivial cases not included)	..	1,565
Total number of men rendered idle by strikes (trivial cases not included)	..	2,853
Approximate loss in wages to workmen concerned (average, £7)	£19,023	
Approximate loss to employers concerned	£16,378	
Total amount of fines inflicted on strikers	£1,708	
Total amount collected to date ..	(80 per cent.)	£1,360

Total number of strikes from year to year—

1894 to 1905	..	Nil.
1906	..	1
1907	..	†12
1908	..	12
1909	..	4
1910	..	11
1911	..	2
Total	..	*42
Average per year	..	2½

* Of this total twelve strikes were of slaughtermen—practically one sympathetic dispute spread over the whole of the Dominion. Six were within scope of Act, and six outside it.

† Slaughtermen only.

RETURN RE STRIKES IN NEW ZEALAND.

Total Number of Strikers.	Total Number of Men rendered Idle by Strike.	Cause of Strike.	Duration.	In favour of	How settled.
41	50	29/6/08.— <i>Bakers (Wellington).</i> Demand for an absolute minimum wage of £3 per week of forty-eight hours being refused. A new award fixing the rates at £2 8s., £2 13s., and £3 3s. per fifty-one-hours week (giving a 3s. increase) took effect a week before the strike. The men also contended that the hours should be forty-eight per week, as was the case for all bakers in the Wellington Industrial District (except Wellington City).	About 76 days; the strike gradually fizzled out	Employers	The employers were hard pushed for labour for a few days, but managed to keep business going, and soon obtained sufficient labour. The union was fined £100 for proposing the strike, and a conviction recorded against each of the strikers. The strike gradually "fizzled out," the strikers obtaining other employment. Fine paid in full.
120	140	27/2/08.— <i>Coal-miners (Blackball).</i> Dismissal of seven hands without notice. A deputation from the union asked the mine-manager for an explanation why the men were dismissed, the reply being that as in future the mine would work only eight hours a day he could do without the men in question. This course, the men considered, was not in accordance with the award. The union therefore decided that unless the dismissed ones were reinstated the men would refuse to return to work.	11 weeks..	Workmen	By agreement between the union and the company. The latter conceded the former's demands in so far as the seven men dismissed were to be reinstated and thirty minutes overtime allowed (instead of quarter of an hour). The only point in difference between the parties was the matter of working two truckers ten-hour shifts, when required, and miners to do the trucking for two extra hours when working ten hours. On account of the flooding of a neighbouring mine, the difficulty was overcome, as the company decided to work two shifts per day (in order to enable those unemployed from the flooded mine to obtain employment without going elsewhere, thus obviating the necessity of truckers working ten hours). The union was fined £75 for striking. Fine paid in full.

37	80	10/8/08.— <i>Coal-miners (Truckers), (Kaitangata).</i>	2 days .. Indefinite	Discharge of a trucker who refused to truck in a level owing to the presence of smoke, black-damp, and water on the road. The other workmen ceased work, refusing to resume unless the discharged one was reinstated	All the men returned to work, and the dismissed one was reinstated. Thirty-seven strikers were fined £30 for the offence. Amount of fines paid to date, £25 3s.
66	80	14/11/06.— <i>Electric Tramways (Auckland).</i>	3 hours .. Workmen	Dismissal of two conductors without notice. There had for some time been dissatisfaction among the motormen in regard to teaching learners, and the dismissal of two conductors for alleged offences (either not committed or not inquired into) brought the trouble to a point. The men refused to work unless the two dismissed ones were reinstated.	By mutual agreement. The dismissed ones were reinstated, and other conditions <i>re</i> future dismissals, favourable to the men, were agreed upon. The company was fined £5 for the offence of dismissing the hands without notice, and two employees were fined 10s. each for striking. Fines paid in full.
222	247	21/5/08.— <i>Electric Tramways (Auckland).</i>	4 days 4 hours	Dismissal of a tram conductor without notice. The company offered no reason for his dismissal, and the union decided that unless he were reinstated or given a reason for his dismissal by noon the following day (21/5/08) the men on the cars would cease work. The company did not reply and the men accordingly ceased work.	By special Board of Conciliation, by whose award the dismissed conductor was reinstated and other conditions in favour of the men were agreed upon. The workers' union was fined £60 for the offence of proposing the strike, and the company had a breach of award recorded against it for failing to give a week's notice of dismissal or a week's wages in lieu thereof. Fines paid in full. The Board was a purely voluntary one, and it was agreed by both sides to accept its finding.

RETURN RE STRIKES IN NEW ZEALAND—continued.

Total Number of Strikers.	Cause of Strike.	Duration.	In favour of	How settled.
27	<i>28/2/10.—Slaughtermen's Assistants (Southdown).</i> Demand for increase of wages from 11½d. to 1s. 3d. per hour being refused. The assistants had been working under an award and also under an industrial agreement, which were still in force pending the filing of an industrial agreement which had recently been arrived at. The new agreement made no provision for slaughtermen's assistants, in consequence of which the men thought they were free to make their own terms, and demanded an increase as mentioned above. Their request was refused, and they ceased work. New assistants were put on in their places, and the slaughtermen then ceased work, refusing to work with non-unionists. When the new assistants were put on those on strike offered to resume work under old conditions if the company would promise to consider their claim for higher wages. This the company declined to do, and consequently the strike was resumed	17 days ..	Employers	The works were idle for a few days, but men were gradually obtained and work was resumed. Twenty-one strikers were each fined £2 for the offence. £10 of fines remains unpaid.
58	<i>15/2/07.—Slaughtermen (Belfast).</i> Demand for increase of wages, from £1 per 100 with 1s. per day bonus for killing sheep to £1 5s. per 100 without bonus, being refused.	17 days ..	Workmen (by compromise)	By agreement between the company and the union to work for increased rate of £1 3s. per 100 without bonus. The strikers were each fined £5 for the offence. £46 1s. 6d. of fines remains unpaid.

46	130	15/2/07.— <i>Slaughtermen (Fairfield).</i> Demand for increase of wages, from £1 per 100 with 1s. per day bonus for killing sheep to £1 5s. per 100 without bonus, being refused	17 days .. Workmen (by compromise)	By agreement between the company and the union to work for increased rate of £1 3s. per 100 without bonus. The strikers were each fined £5 for the offence, £77 6s. 5d. of fines remains unpaid.
48	134	27/2/07.— <i>Slaughtermen (Gisborne).</i> Demand for increase from £1 per 100 for killing sheep to £1 5s. per 100 being refused	5 days .. Workmen (by compromise)	By compromise at the rate of £1 3s. per 100. The strikers were each fined £5 for the offence. The company had 15,000 sheep on the road, which had to be returned to the stations on account of the strike and brought back again, thus causing decrease in value owing to loss of condition. £25 2s. 6d. of fines remains unpaid.
70	211	15/2/07.— <i>Slaughtermen (Islington).</i> Demand for increase of wages, from £1 per 100 with 1s. per day bonus for killing sheep to £1 5s. per 100 without bonus, being refused	17 days .. Workmen (by compromise)	By agreement between the company and the union to work for increased rate of £1 3s. per 100 without bonus. The strikers were each fined £5 for the offence. £55 9s. 10d. of fines remains unpaid.
15	43	26/2/07.— <i>Slaughtermen (Mataura).</i> Demand for increase in wages, for killing sheep, from £1 per 100 to £1 5s. per 100, being refused	8 days .. Workmen (by compromise)	By agreement to work at the increased rate of £1 3s. per 100. No award was in force, therefore no action was taken.
11	83	26/2/07.— <i>Slaughtermen (Ocean Beach).</i> Demand for increase in wages, for killing sheep, from £1 per 100 to £1 5s. per 100, being refused	16 days .. Workmen (by compromise)	By agreement to work at the increased rate of £1 3s. per 100. No award was in force, therefore no action was taken.

* Not ascertainable; estimated at 100 men.

RETURN RE STRIKES IN NEW ZEALAND—*continued*.

Total Number of Strikers.	Total Number of Men rendered Idle by Strike.	Cause of Strike.	Duration.	In favour of	How settled.
43	165	15/2/07.— <i>Slaughtermen (Pareora).</i> Demand for increase of wages, from £1 per 100 with 1s. per day bonus for killing sheep to £1 5s. per 100 without bonus, being refused.	20 days ..	Workmen (by compromise)	By agreement between the company and the union to work for an increased rate of £1 3s. per 100 without bonus. The strikers were each fined £5 for the offence. £95 2s. 6d. of fines remains unpaid.
47	131	13/2/08.— <i>Slaughtermen (Pareora).</i> Dismissal of a slaughterman for smoking on the board. The offending slaughterman had been warned on several occasions to desist, but took no heed and was consequently discharged. The men instantly ceased work.	1 day ..	Workmen	The company took the offending slaughterman on again the following morning, and work was resumed. The men sent delegates to their solicitor, on whose advice they returned to work. No action was taken, as the matter was not considered serious.
11	61	27/2/07.— <i>Slaughtermen (Picton).</i> Demand for increase of wages, from £1 per 100 with 1s. per day bonus for killing sheep to £1 5s. per 100 without bonus, being refused	16 days ..	Workmen (by compromise)	By agreement between the company and the union to work for increased rate of £1 3s. per 100 without bonus. No award was in force, therefore no action was taken.
43	166	15/2/07.— <i>Slaughtermen (Smithfield).</i> Demand for increase of wages, from £1 per 100 with 1s. per day bonus for killing sheep to £1 5s. per 100 without bonus, being refused	17 days ..	Workmen (by compromise)	By agreement between the company and the union to work for increased rate of £1 3s. per 100 without bonus. The strikers were each fined £5 for the offence. £5 of fines remains unpaid.

17	33	Demand for increase in wages, for killing sheep, from £1 per 100 to £1 5s. per 100, being refused	28/2/07.— <i>Slaughtermen (Wallacetown).</i>	16 days ..	Workmen (by compromise)	By agreement to work at the increased rate of £1 3s. per 100. No award was in force, therefore no action was taken.
141	36 ⁹	Demand for increase of pay, from £1 per 100 for killing sheep to £1 5s. per 100, being refused.	12/2/07.— <i>Slaughtermen (Wellington).</i>	5 days ..	Workmen (by compromise)	By agreement to work at £1 3s. per 100. The strikers were cited before the Arbitration Court, but the cases were dismissed as the industrial agreement under which they had been working was held to be invalid.
14	14	Demand for increase of wages, for killing sheep, from £1 per 100 with bonus to £1 5s. per 100 without bonus, being refused	27/2/07.— <i>Slaughtermen (Burnside).</i>	1 day 7 hours	Workmen (by compromise)	There was no award in force; the men returned to work at the rate of £1 3s. per 100 without bonus, subject to the rates fixed by the Arbitration Court being made retrospective to the time of resuming killing. The strike was not illegal.
100	100	On account of accidents occurring in the mine, caused through alleged negligence on the part of some of the men, work had, at intervals, been considerably delayed. The management therefore decided that in future any one responsible for accidents would be suspended. Shortly afterwards the compressed-air pipe in the mine was blown away through the alleged carelessness of two men when firing a shot, which again caused a stoppage of work. The two men were accordingly suspended, and the remainder of the men refused to resume work unless the two men were reinstated and paid compensation for loss of time. This the company declined to do, and work was not resumed.	29/7/10.— <i>Coal-miners (Paparoa, Westland).</i>	9 days ..	Workmen	A conference was held, and upon the company conceding the demands for compensation pending an inquiry into the cases of alleged negligence the men started work again. There was no award or industrial agreement in operation, and therefore the men's action in ceasing work was not illegal.

RETURN RE STRIKES IN NEW ZEALAND—continued.

Total Number of Strikers.	Total Number of Men rendered Idle by Strike.	Cause of Strike.	Duration.	In favour of	How settled.
260	260	The men desired to submit to the contractors certain claims in respect to their conditions of employment, and asked the contractors to meet them through their representative, the secretary of the union. The contractors declined, however, to so meet the men, as the union secretary was not one of their employees, and on this account forty-eight men, constituting the 4 o'clock afternoon shift, refused to work. The rest of the workers joined in the strike, 260 men being idle.	3 days	Workmen	By conference, the contractors stipulating that when a dispute arose the matter should be laid before them first by the men, and in the event of the latter being dissatisfied with the decision arrived at, they (the men) should then have the right to refer the matter to the union, whose officials would be recognized by the contractors. As the main item in dispute—i.e., the recognition of the union had been conceded—the men returned to work. No proceedings were taken against the men.
14	14	Fourteen members of a newly-formed union, registered under the Act, demanded an increase in the overtime rate of pay from 2s. to 2s. 6d. per hour, the rate ruling in other ports. The shipping company refused the request, contending that the men should place their demands before the Arbitration Court in the usual way, and the men ceased work.	2 months..	Workmen (by compromise)	By conference. It was agreed that the company should grant preference of employment to members of the union, and the question of overtime payment should be referred to arbitrators, one of which was to be appointed by the workers, the other by the employers, and the two so appointed to select a third party to act as referee. Work was resumed on these conditions. During the strike most of the strikers found other employment, and the work of discharging and loading the company's vessels was not delayed to any great extent. As there was no award or industrial agreement in force in the district, the strike was not illegal, and no action was taken against the men.

30/1/11.—Tunnel-workers (Otira).

20/12/10.—Waterside Workers (Patea).

17/2/11.—Waterside Workers (Wellington).

Work was resumed the following day, a settlement of the Patea strike having been effected (see above). It was held that a technical breach of the Act had been committed by the men in refusing to work, but no action was taken as the strike was of very short duration, and the employers did not desire prosecution.

The following are "strikes" of a comparatively trivial nature, involving in the majority of cases very little loss of employment or monetary loss :—

13/4/08.—*Bakers' Drivers (Hastings).*

Eight non-unionists demanded an increase of wages from £2 2s. to £2 10s. per week with payment for overtime, the men considering that the rate of £2 2s. was insufficient to live on. The employers refused the request, and the men struck. They were idle for one day. On the advice of the Inspector of Factories, they agreed to return to work. They also agreed to join the union and make application to the Court of Arbitration in the proper way for an increase of wages, if the present rate was deemed insufficient. The strike was not illegal, as the employers concerned were not parties to the industrial agreement.

13/1/09.—*Fellmongers (Pakipaki).*

No "smoke-oh" being provided for in the award, twenty men demanded ten minutes off during the mornings and afternoons. The request was at first refused, and the men ceased work in batches of five. The demand of the men was subsequently conceded, and work was resumed. The strikers were fined £1 each for the offence. The time lost amounted to one hour each per man.

—/2/08.—*Fellmongers and Meat-preservers (Petone).*

Fifty-four men demanded an increase in wages. The rates averaged from 1s. 0½d. to 1s. 2d. per hour. The men were idle only three-quarters of an hour when the company conceded the demand, increasing the rates from 1s. 1½d. to 1s. 3d. per hour. There was no award in force, therefore the strike was not illegal.

22/2/08.—*Fellmongery Hands (Wanganui).*

Nineteen men demanded an increase of wages from 7s. to 8s. per day. The request was at first refused, and the men struck. After about half an hour's delay, however, the employers granted the increase. The strikers were cited for the offence, but the citations were withdrawn, as it was subsequently ascertained that the award under which they had been working had expired.

26/2/08.—*Freezing-chamber Hands (Wanganui).*

In this case nine chambermen demanded an increase from 1s. to 1s. 3d. per hour. The request was at first refused, and the men ceased work; but after about half an hour's delay the employers granted the increase. The strikers were cited for the offence, but the citations were withdrawn, as it was subsequently ascertained that the award under which they had been working had expired.

11/6/08.—*General Labourers (engaged laying tram-lines). (Wanganui).*

Eleven non-unionist labourers struck for an increase of wages from 8s. to 9s. per day. The demand was refused; the men did not resume work, and were paid off. The contractors decided to engage the best men, and pay 9s. per day. The strike delayed work for about one week. The men's action was not illegal, as there was no award in force.

10/6/08.—*Gold-miners (Blackwater).*

On account of a contractor obtaining contracts in addition to those already in hand at higher price than was tendered for by some of the workers, three men working for him on old contract ceased work. The men were idle for two days, after which the contractor surrendered the extra contracts, and the men resumed work. No action was taken, as the matter was considered trivial.

21/12/09.—*Shearers (Queenstown).*

In this case seven men demanded an increase from 18s. per 100 (award rate) to £1 per 100. No specific arrangement had been made in regard to the rate of pay when the men commenced work, it being understood by the employers that the minimum wage under the award—viz., 18s. per 100—would be paid. On the following day, however, the men complained that the sheep were difficult to shear, and asked for an increase to £1 per 100. The demand was refused; the men discontinued work, and were paid off. Other hands were engaged at 18s. per 100, and work resumed after a delay of five days. Five of the strikers were each fined £5 for the offence.

3/1/10.—*Bakers' Carters (Gisborne).*

Eleven men demanded a holiday on the 3rd January, which day was generally observed as a holiday by all the business people in the town. One master baker, however, decided to bake, and the two other employers also requested their hands to work. The men, with the exception of two, refused; but all save four, who left the district, were taken on again next day. The strike was not illegal, as no award or industrial agreement was in force.

7/2/10.—*General Labourers (Tokomaru, Poverty Bay).*

Twenty-six labourers employed in connection with the erection of freezing-works, who had been receiving 8s. per day of eight hours, struck for an increase of wages to 9s. for eight hours' labour. The contractors refused to give the increase asked for, and paid off the strikers. Other men were available, and were engaged. As no award was in existence, the action of the men was not illegal.

9/2/10.—*Mill Employees (Flourmill), (Christchurch).*

In this case the hands asked for an increase from 1s. to 1s. 1½d. per hour for grain-carrying. They ceased work as usual at the end of the day, but, on account of the demand being refused, six of them did not commence work the following morning. Other men were engaged in their places. It was held that the "strike" was not illegal, as the men's employment was an hourly one (the work being of a casual nature), and that consequently it could not be proved that they had acted in concert.

4/2/10.—*Mill Employees (Grain-threshing), (Timaru).*

The crop was a very light one, and the men demanded to be paid by the hour instead of at so-much per 1,000 bushels, as they considered they were not getting a fair remuneration for their work. The millowner endeavoured to make fresh arrangements with the farmer, but the latter would not depart from the original terms, consequently the men ceased work. The millowner then pulled out his mill and secured another more advantageous contract, and all hands except three returned to work with him. The strike was not illegal, there being no concerted action on the part of the men.

12/3/10.—*Mill Employees (Grain-threshing), (Timaru).*

The men in this case ceased work until the employer agreed to supply meals free or give an extra 2s. per 1,000 bushels. The crops had been rather poor, and the men were working short-handed. They lost a good deal of time through bad weather and break-down of machinery. After a few hours' deliberation, however, the men returned to work, and agreed to finish off the paddock in which they were working at 14s. per 1,000 bushels (wheat from stack), the men to have 6d. each for shifting from stack to stack, and the estimated pay for one man during the period they were working short-handed was to be divided amongst the stack-men and the bag-men.

5/4/09.—Slaughtermen's Assistants (Picton).

Twelve assistants who were receiving 10½d. per hour struck for an increase to 1s. per hour. After two days, during which time the men were idle, the company offered 11½d. per hour, at which rate the men agreed to return to work. As no award was in force, the action of the men in ceasing work was not illegal.

13/7/09.—Stevedores (Napier).

Eleven men refused to handle a sixth load of frozen meat sent out to an ocean liner lying in the roadstead, a mutual arrangement having previously been come to between the employers and the men to handle five cargoes only, the remainder to be worked the following day. Owing to a mishap to one of the lighters, work had been delayed, and the fifth cargo was finished at 9 30 p.m. As it was decided to despatch the liner that night in order that she could catch the tide at Gisborne, a sixth cargo was sent out to her, and the men refused to touch it as they considered it unreasonable to be asked to work any longer, and as they were prepared to carry out their part of the agreement to work the remaining cargo (after the five loads) on the following morning. The liner was, however, despatched without much delay, the crew working the load in dispute. Under the circumstances it was decided that no strike had occurred.

6/10/08.—Tunnel Workers (Otira).

In this instance thirty men working on six-hour shift demanded an interval for meal (crib-time). It appears that eight-hour shifts with crib-time were usually worked, but in wet weather six-hours without crib constituted the shift. The employers would not allow the interval asked for, and the men ceased work. They resumed the following day. The strike was not illegal, as no award or industrial agreement was in existence.

4/10/10.—Shearers (Muriwai, Gisborne).

Six men (unionists) engaged to shear at £1 per 100 and 3s. per 100 extra in lieu of rations, demanded £1 per 100, with rations, the rate fixed by awards recently made in Canterbury and Wellington. The demand was refused, and the men ceased work. Shearing was not delayed as other men (non-unionists) accepted work at the rate offered by the employers. The strike was not illegal, as there was no award or industrial agreement in existence in the district.

12/5/10.—Slaughtermen's Assistants (Eveline, Oamaru).

In this case the assistants asked for an increase from 11d. to 1s. 1d. per hour, the ruling rate in other freezing-works. The demand was not conceded, and the men refused to start work at the usual time in the morning, so that killing operations were suspended. As, however, much delay would have caused serious loss to the company, the strikers' places were filled by other men at 1s. per hour, and work was resumed after only a few hours' cessation. As there was no award or industrial agreement in force in the district, the strike was not illegal.

26/2/10.—Waterside Workers (Wellington).

On account of the use of hooks being prohibited in handling a cargo of cement, fifty men engaged discharging the cargo ceased work. As the bags had not been carefully stowed the work was severe on the men, the lugs of the bags being in some cases hidden and the bags interlocked. On this account the men claimed that they should have some aid in handling the bags. The strike lasted one day, after which work was resumed without the use of hooks upon the company agreeing to put on two extra men to work in each hold. Proceedings were taken by the Labour Department against the men for a breach of the strike provisions of the Act. The Department was non-suited on the ground that it had not been proved that a strike within the meaning of the Act had occurred, inasmuch as the evidence did not disclose that the men ceased work in pursuance of an agreement or common understanding between them, and with the intention of compelling or inducing the company to agree to the use of hooks, or to put on extra men.

The following are cases of lockouts under sections 4 and 5 of the Industrial Conciliation and Arbitration Amendment Act, 1908. They are all of a trivial nature.

6/5/07.—A Reefton gold-mining company was proceeded against for an alleged lockout. The dispute arose on the "eight-hours bank-to-bank" question and the arrangement of overtime payment. The Court held that the company had not closed down the work of the mine in order to lock out its men so as to compel them to meet the company on the above matter, but to make the necessary connection with another shaft in a neighbouring mine so as to reduce the time taken by the miners to reach the face.

12/3/08.—In connection with the Blackball strike, the Blackball Coal-miners' Union proceeded against the Blackball Coal Company for an alleged lockout in dismissing the men, which action caused a strike. The Court held that, as only seven men out of eighty were dismissed, and the company was willing and anxious to carry on operations with the remaining seventy-three, it was clear no lockout had occurred.

9/2/10.—A case under the Wellington Shearers' award was taken against a Dannevirke sheepowner. The men refused to shear, alleging that the sheep were wet, and in consequence the employer dismissed them. Action was taken by the Department, and the case was dismissed by the Magistrate, who held that on the evidence the sheep were dry, and therefore no offence had been committed.

4/10/10.—A case under the Hawke's Bay Fishermen's industrial agreement was taken against a Napier trawling company. A trawler had been running at a loss, and the owners asked for a conference with the crew in reference to a proposed charter and partnership scheme. Ostensibly to allow of this conference being held the boat was laid up for two days, and it was alleged that this was done with the intention of compelling the crew to agree to the proposed scheme. The Magistrate held that the evidence was insufficiently convincing to impute such an intention to the defendant company, and dismissed the case.

CO-OPERATIVE PUBLIC WORKS.

The construction of public works under the co-operative system was adopted by the central government in 1891, and has continued to this date. Works such as railroad and ordinary road formation, requiring little skill, are specially adapted to the system, though artisan labour is employed in like manner.

The method is somewhat as follows: When a length of railway is to be constructed on the co-operative principle the formation-work is divided into sections, the size of which will depend upon the difficulty of the work. Plans and a simple specification of the work are prepared, also an estimate of the cost, based on the current rate of wages ruling in the district for similar work. The work, at a price of so much per unit of quantity or measurement, is offered to a party of men, who, if they accept, become the contractors. The work done is valued periodically and full payment made to the party, who divide the money among themselves in accordance with their own agreement. The engineers in charge of the works have a certain amount of discretion and control in respect of the character of the men employed, the progress of the work, hours of labour, &c. So long has the system been in use that the methods have become stereotyped, the workmen being as fully alive to their own interests as the engineers are to the interests of the State. Any dispute as

to the value of the work is quickly settled upon the spot, and serious friction is unknown.

The number of men employed varies according to the supply of labour available and the amount of work to be performed. The number engaged during each month of the year ended 31st March, 1911, was as follows:—

Month.			Roads Department.	Public Works Department.	Total.
April,	1910	..	1,426	3,602	5,028
May,	"	..	1,291	3,487	4,778
June,	"	..	1,219	3,589	4,808
July,	"	..	1,280	3,396	4,676
August,	"	..	1,433	3,315	4,748
September,	"	..	1,856	3,149	5,005
October,	"	..	1,952	3,264	5,216
November,	"	..	2,127	3,433	5,560
December,	"	..	2,087	3,353	5,440
January,	1911	..	2,330	3,401	5,731
February,	"	..	2,839	3,601	6,440
March,	"	..	3,198	3,802	7,000

The average number of men employed in each year was as follows:—

Year.			Roads Department.	Public Works Department.	Total.
1891-92	..	..	261	527	788
1892-93	..	..	280	842	1,122
1893-94	..	..	933	1,015	1,948
1894-95	..	..	1,103	962	2,065
1895-96	..	..	1,572	764	2,336
1896-97	..	..	1,459	854	2,313
1897-98	..	..	1,552	890	2,442
1898-99	..	..	1,613	1,194	2,807
1899-1900	..	..	1,825	1,243	3,068
1900-1	..	..	1,820	2,090	3,910
1901-2	..	..	1,894	2,673	4,567
1902-3	..	..	1,319	1,733	3,052
1903-4	..	..	1,493	2,305	3,798
1904-5	..	..	1,407	2,119	3,526
1905-6	..	..	3,440	2,345	5,785
1906-7	..	..	2,393	4,614	7,007
1907-8	..	..	2,132	3,000	5,132
1908-9	..	..	3,482	4,031	7,513
1909-10	..	..	1,762	3,929	5,691
1910-11	..	..	1,920	3,450	5,370

LABOUR DEPARTMENT.

The total number of men for whom employment has been found by the Department of Labour up to the end of March, 1911, is given below. The statement also shows the number of persons dependent upon the men assisted:—

	Men.	Dependants.
June, 1891, to 31st March, 1892 ..	2,598	4,729
1st April, 1892, to 31st March, 1893 ..	3,874	7,802
1st April, 1893, to 31st March, 1894 ..	3,341	7,942
1st April, 1894, to 31st March, 1895 ..	3,030	8,883
1st April, 1895, to 31st March, 1896 ..	2,871	8,424
1st April, 1896, to 31st March, 1897 ..	1,718	4,719
1st April, 1897, to 31st March, 1898 ..	2,035	4,928
1st April, 1898, to 31st March, 1899 ..	2,115	4,759
1st April, 1899, to 31st March, 1900 ..	2,147	4,471
1st April, 1900, to 31st March, 1901 ..	3,124	5,432
1st April, 1901, to 31st March, 1902 ..	1,830	2,747
1st April, 1902, to 31st March, 1903 ..	3,704	5,934
1st April, 1903, to 31st March, 1904 ..	2,860	3,085
1st April, 1904, to 31st March, 1905 ..	3,130	3,425
1st April, 1905, to 31st March, 1906 ..	,712	7,351
1st April, 1906, to 31st March, 1907 ..	7,393	4,187
1st April, 1907, to 31st March, 1908 ..	6,305	4,408
1st April, 1908, to 31st March, 1909 ..	10,391	7,510
1st April, 1909, to 31st March, 1910 ..	8,506	10,164
1st April, 1910, to 31st March, 1911 ..	7,102	8,454
	84,781	119,354

WOMEN'S BRANCHES.

In each of the four chief centres of population—Auckland, Wellington, Christchurch, and Dunedin—women's employment branches of the Labour Department were established in June, 1908. In January, 1909, a branch was opened at Nelson, and in October, 1910, a branch was established at Masterton. Each branch is in charge of an experienced female officer, and every assistance is given, free of charge, to women seeking employment. During the year ended 31st March, 1911, work was found for 417 married and 1,827 single women; making a total of 7,650 women assisted since the initiation of the system. In most cases the employment was domestic service.

WORKERS' DWELLINGS.

On the 31st March, 1911, the number of houses erected (under the previous Act) was 126, of which six were then unoccupied. The following table shows the average cost of the land and of the dwellings, including fencing, drainage, and water-supply, charge for administration and contingencies; also the average gross weekly rental, including insurance and local rates. The number of rooms excludes scullery, wash-house, and bathroom.

WORKERS' DWELLINGS OCCUPIED, 31ST MARCH, 1911.

Locality.	Number of		Average Cost of		Average Gross Weekly Rental.
	Dwellings.	Rooms per Dwelling.	Allotment.	Dwelling.	
			£	£	s. d.
Ellerslie and Otahuhu, Auckland	5	4	96	432	12 5
	30	5	114	425	12 8
Petone, Wellington ..	24	5	100	435	12 3
	3	4	253	444	15 3
Wellington City	5	5	221	500	15 9
	4	6	258	539	17 5
Sydenham and Addington, Christchurch	6	4	72	430	11 0
	23	5	80	456	11 8
	2	6	85	503	12 7
Windle, Dunedin	18	5	91	407	11 1

ADVANCES TO WORKERS.

The Superintendent of the State-guaranteed Advances Office is authorized to lend money, for the purpose of purchasing or erecting a dwelling, to any person employed in manual or clerical work who is not in receipt of an income of more than £200 per annum, and is not the owner of any land other than the allotment on which it is proposed to build. The sum advanced shall not exceed £450, nor may any advance be granted exceeding the value of the dwelling-house to be erected, or exceeding three-fourths of the value of the security in the case of freehold land, or three-fourths of the lessee's interest in the lease in the case of leasehold land. The advance is secured by a mortgage over the whole property.

The interest is payable half-yearly, together with an instalment of the principal, which by this means is fully repaid in thirty-six and a half years, when the mortgage is released. Valuation fees and the cost of preparing and registering the necessary deeds are fixed by regulation on an exceedingly low scale, and are payable by the borrower.

The Advances Department will supply intending borrowers, free of charge, with complete plans and specifications of various types of buildings, costing from £200 to £650. The reason for including a type of building to cost £200 above the maximum authorized to be lent to workers is that an applicant may have some money saved and would wish to expend the amount on a better building than could be erected for the sum borrowed.

An explanation of the mode of procedure to be adopted by intending borrowers, together with examples and tables of repayments, is given in Part III of this volume.

The applications received for loans during the year ended 31st March, 1911, numbered 2,125, the aggregate amount required

being £656,757. The advances actually granted during the year numbered 1,296 for an aggregate of £407,760. The tenures upon which these loans were made were:—

Tenure.		Number of Loans.	Aggregate Amount.
Freehold	.. ..	1,208	390,700
Leasehold	.. ..	88	17,060
		—	—
Totals	.. ..	1,296	407,760

The total number of loans and the aggregate amount authorized in each provincial district from the inception of the system to the 31st March, 1911, is as follows:—

Provincial District.					Number of Applications.	Amount of Advances Authorized.
						£
Auckland	..	..	..	..	1,465	360,735
Taranaki	..	..	..	..	162	40,635
Hawke's Bay	..	..	..	..	336	90,230
Wellington	..	..	..	..	1,470	420,330
Marlborough	..	..	..	..	187	51,370
Nelson	..	..	..	..	126	29,370
Westland	..	..	..	..	161	34,585
Canterbury	..	..	..	..	1,240	358,485
Otago—						
Otago portion	..	..	..	..	427	113,890
Southland portion	..	..	..	..	200	48,125
					—	—
Totals	..	..	..	..	5,774	1,547,755

Three hundred and twenty-two grants, amounting to £84,965, were declined, so that the net authorizations numbered 5,452 for an aggregate amount of £1,462,790.

The total amount advanced to the end of the financial year was £1,277,765, and the net amount outstanding at the same date was £1,178,440, secured upon the following tenures:—

Tenure		Number of Loans outstanding.	Aggregate Amount outstanding.
			£
Freehold	.. ..	3,928	1,118,105
Leasehold	.. ..	354	60,335
		—	—
Totals	.. ..	4,282	1,178,440

The following table gives particulars of the transactions since the passing of the Act on 29th October, 1906:—

ADVANCES TO WORKERS. — TRANSACTIONS DURING EACH FINANCIAL YEAR
1908 TO 1911.

Transactions.	1907-8.	1908-9.	1909-10.	1910-11.	Total to 31st March, 1911.
Loans raised £	185,000	268,500	350,000	346,265	1,169,765
Applications received .. No.	1,150	1,784	2,028	2,125	7,247
Applications received, amount .. £	308,690	472,989	550,651	656,757	2,032,007
Applications granted .. No.	1,072	1,220	1,854	1,521	5,774
Applications granted, amount .. £	268,430	307,495	470,425	473,530	1,547,755
Amount advanced £	203,978	298,184	362,353	407,760	1,277,765
Amount repaid £	6,312	18,792	26,295	47,925	99,324

The financial position of the Advances to Workers Office as on 31st March, 1911, is shown in the following table :—

ADVANCES TO WORKERS BRANCH: LIABILITIES AND ASSETS, 31ST MARCH, 1911.

<i>Liabilities.</i>		<i>Assets.</i>	
	£ s. d.		£ s. d.
Sundry loans	844,765 0 0	Investment Account—	
Advances from Settlers Branch	325,000 0 0	Advances on	£ s. d.
Accrued interest payable on		mortgage ... 1,277,765	0 0
account of loans ...	9,473 17 4	Less repay-	
Advances Suspense Account	19,714 0 0	ments ... 99,806	1 2
Fire Loss Suspense Account	341 0 0		1,177,958 18 10
Suspense Account ...	539 9 9	Mortgage instalments receiv-	
Reserve Fund	8,979 7 2	able—Overdue ...	481 12 11
		Interest receivable—Overdue	2,305 12 9
		Interest receivable—Accrued	8,792 3 7
		Insurance Premiums Account	34 14 3
		Sinking Fund Account ...	16,597 7 1
		Cash in hand and	
		in bank ... 2,681	2 4
		Less unrepresented	
		cheques ... 38	17 6
			2,642 4 10
			£1,208,812 14 3
	£1,208,812 14 3		£1,208,812 14 3

SECTION XVI. — OCCUPATION OF LAND; AND LIVE-STOCK.

THE occupation of land must not be confused with ownership,* because there are large parcels of lands held which are unused and unoccupied. Neither can lands occupied be properly compared with the returns of Crown lands alienated or in process of alienation, for certain lands have passed into the hands of Europeans which were never made waste lands of the Crown.

The figures in the following tables relating to occupation of land and live-stock are those for 1910-11.

The area of land in occupation during 1910-11 has been returned at 40,238,126 acres, including Crown lands leased for pastoral purposes only, or 2,033,777 acres in excess of the area for the year 1903-9. No statistics were collected for the season 1909-10.

Tables are given showing the numbers and acreages of holdings, grouped according to size, since 1904-5.

In 1895 the holdings of over 1 acre in extent, as returned to the Registrar-General, numbered only 46,676. Holdings occupied by Maoris were excluded, besides holdings of exactly 1 acre, also gardens and orchards attached to residences.

OCCUPIED LANDS: HOLDINGS.

[This and the succeeding statement deal with the full extent of occupied land, *including* Crown pastoral leases.]

Sizes of Holdings.		Number of Holdings.				
1 acre to	10 acres, inclusive	1905-6.	1906-7.	1907-8.	1908-9.	1910-11.
10 acres to	50	19,787	20,455	21,186	21,927	18,075
50	"	11,745	12,012	12,147	12,360	12,151
100	"	7,562	7,767	7,760	7,780	7,948
200	"	9,950	10,251	10,098	10,206	10,746
320	"	6,531	6,820	6,827	6,831	7,083
640	"	7,219	7,497	7,602	7,828	8,466
1,000	"	2,750	2,936	3,011	3,202	3,611
5,000	"	3,497	3,682	3,816	4,090	4,780
10,000	"	408	415	436	458	526
20,000	"	237	248	247	235	264
50,000	"	166	167	153	151	136
50,000 acres and over	.. ..	90	88	84	84	90
		69,942	72,338	73,367	75,152	73,876

The holdings are shown to have increased by the number of 3,934 since 1905-6.

* The latest information in reference to ownership of land which is available gives figures up to the 31st March, 1910. It is contained in Parliamentary Return B.-17A of the year 1911, and estimates the total number of owners of land (town and country holdings of all sizes) to be 159,000. The most important figures (showing ownership of *productive* land) are those of freeholders outside boroughs and town districts, and excluding holdings of under 5 acres. These figures are:—

NEW ZEALAND OWNERS (OVER 5 ACRES).					
Year 1910	...	46,922	Year 1889	...	37,432
" 1906	...	45,068	" 1886	...	34,450
" 1902	...	43,735	" 1883	...	30,764
" 1892	...	38,935			

The total acreage of occupied land for each of the last five years is shown:—

OCCUPIED LANDS : ACREAGES.

Sizes of Holdings in Acres.		1905-6 Acres.	1906-7. Acres.	1907-8. Acres.	1908-9. Acres.	1910-11. Acres.
1 to	10 inclusive	79,926	81,339	86,870	88,749	81,397
10 "	50 "	324,375	328,657	340,498	346,453	335,056
50 "	100 "	591,209	599,236	604,567	611,622	618,980
100 "	200 "	1,514,084	1,544,242	1,533,048	1,544,963	1,628,608
200 "	320 "	1,692,824	1,742,123	1,764,903	1,769,875	1,818,067
320 "	640 "	3,306,475	3,590,762	3,491,728	3,582,822	3,872,809
640 "	1,000 "	2,220,149	2,354,891	2,425,028	2,618,008	2,931,721
1,000 "	5,000 "	6,955,810	7,212,587	7,677,624	8,088,931	9,388,126
5,000 "	10,000 "	2,874,562	2,822,030	2,994,820	3,193,571	3,525,514
10,000 "	20,000 "	3,278,498	3,536,334	3,365,132	3,234,480	3,751,346
20,000 "	50,000 "	5,273,472	4,911,977	4,870,772	4,781,801	4,157,740
50,000 "	and over	9,056,576	8,884,295	8,409,298	8,348,074	8,128,742
		37,167,460	37,408,473	37,564,288	38,204,349	40,238,126

Of a total of 73,876 holdings shown above, 38,174, or 51·67 per cent., were from 1 to 100 acres in extent; 48,920, or 66·22 per cent., were from 1 to 200 acres; and 56,003, or 75·81 per cent., were from 1 to 320 acres in size. The total number over 320 acres was only 17,873, or 24·19 per cent. of the whole, thus indicating a considerable degree of moderately close settlement, although the area of the holdings over the 320-acres limit necessarily shows as very large in a table which includes the Crown pastoral leases.

The extent of land occupied as shown in the returns according to tenure is tabulated for each provincial district. The acreage in the last column of the statement is apparently short of the actual facts, judging from the figures shown in the table of "Crown Tenants," as given in the report of the Surveyor-General. The difference lies in what has been returned for Crown pastoral leases to the agricultural-statistics collectors and the areas on which rent is paid given by the Lands Department.

OCCUPATION OF LAND : TENURE 1910-11.

Provincial Districts.	Total of Holdings.	Freehold.	Leased from Individuals or Public Bodies.	Leased from Natives.	Held from Crown under Different Tenures.
	Acres.	Acres.	Acres.	Acres.	Acres.
Auckland	7,769,048	4,382,289	610,095	787,515	1,989,149
Taranaki	1,358,271	618,246	257,973	117,565	364,487
Hawke's Bay	3,211,086	1,757,830	278,959	654,021	520,276
Wellington	4,434,755	2,518,309	673,605	462,106	780,735
Marlborough	2,440,109	804,021	105,561	41,975	1,488,552
Nelson	2,314,116	1,002,256	139,476	21,490	1,150,894
Westland	961,068	76,966	34,237	6,963	842,902
Canterbury	6,587,587	2,581,682	926,471	19,322	3,060,112
Otago—					
Otago portion	7,997,952	1,493,718	509,867	30,995	5,963,372
Southland portion	3,164,134	1,316,380	462,642	5,476	1,379,636
Totals	40,238,126	16,551,697	3,998,886	2,147,428	17,540,115

Arranged according to the number of holdings, the provincial districts stand in order as under:—

Auckland	..	..	..	..	21,180 holdings.
Otago	..	..	..	..	13,484 "
Canterbury	..	..	..	..	11,576 "
Wellington	..	..	..	..	11,252 "
Taranaki	..	..	..	..	5,423 "
Hawke's Bay	..	..	..	..	4,648 "
Nelson	..	..	..	..	3,650 "
Marlborough	..	..	..	..	1,718 "
Westland	..	..	..	..	945 "

The occupied holdings of the North Island now considerably outnumber those of the South Island, the numbers being—North Island, 42,503; South Island, 31,373. For the year 1900–1901 the returns showed 30,086 holdings for the South Island, against 32,700 for the North.

The full details of holdings and acreages, classified according to size, for the year 1910–11 will be found in the following table:—

OCCUPATION OF LAND: PROVINCIAL DISTRICTS. CLASSIFIED HOLDINGS.

TABLE showing for the Year 1911 the Occupied Holdings and the Acreages (including Crown Pastoral Leases) in Groups of Sizes, according to the Provincial Districts.

Provincial Districts.	Total of Holdings.	1-10 Acres, Inclusive.	11-50 Acres, Inclusive.	51-100 Acres, Inclusive.	101-200 Acres, Inclusive.	201-320 Acres, Inclusive.	321-640 Acres, Inclusive.	641-1,000 Acres, Inclusive.	1,001-5,000 Acres, Inclusive.	5,001-10,000 Acres, Inclusive.	10,001-20,000 Acres, Inclusive.	20,001-50,000 Acres, Inclusive.	Over 50,000 Acres.
Auckland: Area in acres	7,769,048	20,500	102,821	185,792	509,383	533,707	1,151,137	884,126	2,457,800	755,717	539,919	371,657	316,489
Number of holdings	27,180	4,638	3,618	2,478	3,361	2,074	2,512	1,038	1,384	116	44	12	5
Taranaki: Area in acres	1,358,271	4,845	17,447	65,544	205,928	178,111	242,835	173,088	438,215	32,258	...	...	...
Number of holdings	5,423	354	638	892	1,305	700	533	216	251	4	...	...	...
Hawke's Bay: Area in acres	6,973	21,025	34,782	34,782	77,235	79,780	190,233	190,780	872,251	567,103	475,686	277,080	438,168
Number of holdings	4,648	1,408	788	472	511	322	386	232	400	80	32	11	5
Wellington: Area in acres	4,434,755	14,813	48,465	86,654	230,651	228,886	573,232	438,387	1,542,537	496,209	436,872	92,337	224,432
Number of holdings	11,252	3,254	1,770	1,094	1,528	896	1,240	560	799	73	31	3	4
Marlborough: Area in acres	2,440,109	1,946	5,478	10,466	26,758	31,044	107,707	84,723	385,980	194,694	407,263	506,544	677,506
Number of holdings	1,718	475	209	739	179	119	226	105	192	31	24	15	4
Nelson: Area in acres	3,380	17,811	31,897	64,925	82,599	207,741	196,282	529,000	159,171	159,171	152,122	279,162	530,016
Number of holdings	2,314,116	406	653	407	444	317	448	250	282	21	10	8	4
Westland: Area in acres	961,068	700	4,651	8,098	18,370	29,782	56,857	42,853	59,830	127,039	129,856	340,535	142,437
Number of holdings	945	200	163	105	120	115	125	46	29	20	9	11	2
Canterbury: Area in acres	6,587,587	14,502	60,890	86,460	194,829	250,770	553,054	408,450	1,381,409	336,680	386,271	788,005	2,136,257
Number of holdings	11,576	3,351	2,192	1,137	1,317	976	1,231	509	698	55	27	27	26
Otago—													
Otago portion: Area in acres	7,997,952	8,955	35,913	62,724	161,144	197,984	401,721	314,783	1,247,213	673,802	935,894	1,093,700	2,894,119
Number of holdings	8,020	1,940	1,320	833	1,094	772	885	365	584	95	67	34	31
Southeast portion: Area, acres	3,164,134	4,773	20,545	36,553	139,385	205,414	398,302	227,049	473,901	202,781	287,463	408,720	759,248
Number of holdings	5,464	1,019	800	461	887	792	880	289	261	31	20	15	9
Totals { Area in acres ... Number of holdings	40,238,126 73,876	81,397 13,075	335,056 12,151	618,980 7,948	1,638,606 10,746	1,818,087 7,083	3,872,809 8,466	2,931,721 3,611	9,388,126 4,780	3,525,514 626	3,751,946 864	4,157,740 136	8,138,742 90

OWNERSHIP OF LAND.

From the tables following it will be seen that of the total area of New Zealand (66,861,440 acres) there was held as freehold on 31st March, 1910, more than nineteen million and a half acres of rural lands. The balance is in the hands of owners of urban lands, the Crown, Native owners, local bodies, church, education, friendly societies, and other public bodies. The number of freeholders of country lands (*i.e.*, exclusive of those in boroughs and townships), with the area held, and the capital and unimproved values of same on 31st March, 1910, is as follows:—

Size of Holdings in Acres.		Number of Owners.	Total Area.	Capital Value.	Unimproved Value.
			Acres.		
5 and under	320 ..	36,234	3,457,551	39,426,890	26,224,383
320	" 640 ..	5,394	2,422,803	18,177,896	13,049,185
640	" 1,000 ..	2,063	1,618,609	11,179,793	8,087,573
1,000	" 2,000 ..	1,748	2,487,571	14,967,929	11,034,208
2,000	" 5,000 ..	1,006	3,966,195	16,733,307	12,612,876
5,000	" 10,000 ..	306	2,113,081	9,214,768	6,934,896
10,000	" 20,000 ..	121	1,661,381	6,044,068	4,665,446
20,000	" 30,000 ..	28	683,368	1,984,990	1,508,004
30,000	" 40,000 ..	5	175,001	313,003	232,999
40,000	" 50,000 ..	6	262,565	331,727	196,091
50,000	" 100,000 ..	11	727,156	723,084	565,858
100,000	" 150,000 ..	..	..	..	..
150,000 and over	..	..	..	..	..
Totals	..	46,922	19,575,281	119,097,455	85,111,019

NUMBER OF FREEHOLDERS (EXCLUSIVE OF THOSE IN BOROUGHES OR TOWNSHIPS) WITH SIZES OF HOLDINGS.

Sizes of Holdings, in Acres.		Number of Freeholders in						
		1883.	1886.	1889.	1892.	1902.	1906.	1910.
5 and under	320 ..	25,407	28,521	31,324	32,211	34,800	35,200	36,234
320	" 640 ..	2,695	2,982	3,189	3,553	4,735	5,107	5,394
640	" 1,000 ..	931	1,043	1,035	1,143	1,580	1,862	2,063
1,000	" 2,000 ..	816	916	906	992	1,369	1,553	1,748
2,000	" 5,000 ..	465	509	507	566	775	864	1,006
5,000	" 10,000 ..	203	220	221	208	260	278	306
10,000	" 20,000 ..	141	151	134	148	123	129	121
20,000	" 30,000 ..	49	43	50	45	40	40	28
30,000	" 40,000 ..	23	31	26	30	21	14	5
40,000	" 50,000 ..	11	5	13	9	9	8	6
50,000	" 100,000 ..	19	25	18	20	18	12	11
100,000	" 150,000 ..	2	2	2	4	2	..	..
150,000 and over	..	2	2	7	6	3	1	..
Totals	..	30,764	34,450	37,432	38,935	43,735	45,068	46,922

Previous to the year 1906 the areas of freehold lands under 10,000 acres were not classified, but it is possible to compare the areas above that quantity as held in 1889, 1906, and 1910. Still excluding lands in the hands of Native owners, local bodies, church, education, friendly societies, and other public bodies, the figures are :—

Area in acres.			1889. Acres.	1906. Acres.	1910. Acres.
10,000 and under 20,000	..	..	1,911,154	1,817,562	1,661,381
20,000 " 30,000	..	..	1,221,829	1,002,816	683,368
30,000 " 40,000	..	..	921,435	474,822	175,001
40,000 " 50,000	..	..	570,646	353,100	262,565
50,000 " 75,000	..	..	723,459	490,507	560,250
75,000 " 100,000	..	..	522,590	342,493	166,906
100,000 " 150,000	..	..	241,423	..	..
150,000 and over	..	..	1,389,664	223,242	..

It would appear from the above that there has been a reduction in the total held in areas of 10,000 acres and over of 2,797,658 acres during the period 1889–1906, and a further reduction of 1,195,071 acres during the period 1906 to 1910, or a total reduction of 3,992,729 acres between 1889 and 1910. The average area held by owners of 10,000 acres and upwards shows a steady decrease since 1889, as follows :—

Year.	Average Area held. Acres.		
1889	..	..	30,009
1892	..	..	29,924
1902	..	..	28,312
1906	..	..	23,061
1910	..	..	20,523

LIVE-STOCK.

A comparative table is presented showing the increase in live-stock since the year 1858. The figures are taken from the census as far as 1891, but for 1895–96 and following years up to 1910 the results of the enumeration made annually by the Department of Agriculture have been made use of. The figures for 1911 are Census figures.

Year.	Horses.	Asses and Mules.	Cattle.	Sheep.	Goats.	Pigs.	Poultry.
1858 ..	14,912	122	137,204	1,523,324	11,797	40,734	*
1861 ..	28,275	153	193,285	2,761,383	12,191	43,270	236,098
1864 ..	49,409	339	249,760	4,937,273	12,005	61,276	378,414
1867 ..	65,715	323	312,835	8,418,579	11,964	115,104	676,065
1871 ..	81,028	397	436,592	9,700,629	12,434	151,460	872,174
1874 ..	99,859	267	494,917	11,704,853	14,276	123,921	1,058,198
1878 ..	137,768	241	578,430	13,069,338	14,243	207,337	1,323,542
1881 ..	161,736	362	698,637	12,985,085	11,223	200,083	1,566,114
1886 ..	187,382	297	853,358	16,564,595	10,220	277,901	1,679,021
1891 ..	211,040	348	831,831	18,128,186	9,055	308,812	1,790,070
1895–96	237,418	426	1,047,901	19,826,604†	*	239,778	*
1896–97	249,813	434	1,138,067	19,138,493†	*	209,834	*
1897–98	252,834	393	1,209,165	19,687,954†	*	186,027	*
1898–99	258,115	534	1,203,024	19,673,725†	*	193,512	*

* Not enumerated.

† Numbers for April, 1895, and years following.

LIVE-STOCK—*continued.*

Year.	Horses.	Asses and Mules.	Cattle.	Sheep.	Goats.	Pigs.	Poultry.
1899-1900	261,931	459	1,222,139	19,348,506†	*	249,751	*
1900-1 ..	266,245	480	1,256,680	19,355,195†	*	250,975	*
1901-2 ..	279,672	406	1,361,784	20,233,099†	*	224,024	*
1902-3 ..	286,955	464	1,460,663	20,342,727†	*	193,740	*
1903-4 ..	298,714	468	1,593,547	18,954,553†	*	226,591	*
1904-5 ..	314,322	448	1,736,850	18,280,806†	*	255,320	*
1905-6 ..	326,537	429	1,810,936	19,130,875†	*	249,727	*
1906-7 ..	342,608	451	1,851,750	20,108,471†	*	242,273	3,191,604
1907-8 ..	352,832	425	1,816,299	20,983,772†	*	241,128	*
1908-9 ..	363,259	519	1,773,326	22,449,053†	*	245,092	*
1909 ..	*	*	*	23,480,707†	*	*	*
1910 ..	*	*	*	24,269,620†	*	*	*
1911 ..	404,284	404	2,020,171	23,996,126†	*	348,754	3,691,957

* Not enumerated.
Interim Return.

† Numbers for April, 1899, and years following.

‡ Second

The stock owned by Maoris in April, 1911, which are included in the above figures, comprised: Horses, 48,222; cattle, 61,300; sheep, 486,922; pigs, 33,290.

NUMBER OF HORSES, CATTLE, PIGS, AND ANGORA GOATS IN EACH COUNTY IN THE DOMINION IN APRIL, 1911, AND
NUMBER OF SHEEP, APRIL, 1910.

County.	Horses.	Asses and Mules.	Cattle (including Dairy Cows).	Dairy Cows (in Milk and Dry).	Sheep.	Angora Goats.	Pigs.
<i>Provincial District of Auckland.</i>							
Mangonui	3,164	1	13,678	3,398	22,177	112	2,819
Whangaroa	1,100	..	3,264	807	9,047	132	938
Hokianga	4,443	..	18,409	4,869	11,218	29	2,619
Bay of Islands	2,741	6	14,933	3,491	41,646	264	1,899
Whangarei	5,415	6	45,581	14,583	32,796	260	4,475
Hobson	2,109	..	22,055	4,803	46,932	34	1,793
Otago	2,716	4	24,376	6,608	59,074	134	2,757
Rodney	2,972	5	20,391	5,807	74,450	116	2,125
Waitemata	3,594	14	15,553	6,084	47,662	175	3,242
Eden	6,124	15	9,047	4,145	5,245	60	2,939
Manukau	10,910	10	60,766	28,492	116,385	406	11,360
Coromandel	997	1	6,114	1,531	26,508	74	750
Thames	1,558	..	8,507	3,398	5,605	6	1,933
Waikato	5,791	1	36,091	14,371	71,619	276	8,002
Raglan	3,951	1	31,659	5,617	145,013	137	2,793
Waipa	5,383	3	32,500	13,541	40,337	44	7,319
Kawhia	1,091	..	5,832	1,304	37,408	3	773
Waitomo	4,508	..	19,952	4,451	..	13	3,828
Awakino	657	..	7,514	496	51,367	..	318
Ohinemuri	2,504	3	11,405	4,319	6,131	12	2,871
Piako	2,910	..	23,127	8,866	..	7	3,825
Matamata	3,525	1	28,402	9,993	..	3	4,365
Tauranga	5,335	2	27,926	8,264	5,291	4	4,802
East Taupo and Rotorua	3,104	1	5,979	1,876	35,776	..	1,735
West Taupo and Ohura	4,085	8	20,325	3,430	..	1	4,574
Whakatane	1,970	4	11,684	3,909	34,477	1	1,259
Opotiki	2,301	..	9,121	3,152	79,132	1	1,956
Waipatu	5,713	94	36,682	560	613,270	13	2,681
Cook	10,159	15	69,332	6,625	967,952	32	4,625
Waikohu	4,191	..	45,182	1,596	512,761	..	1,113
Totals	115,021	195	684,387	180,386	3,321,018	2,349	96,538

Provincial District of Taranaki.

Clifton	..	2,040	..	21,994	6,287	80,914	104	2,782
Taranaki	..	5,268	..	58,113	25,027	38,535	828	10,019
Egmont	..	3,369	4	39,983	17,770	11,895	8	5,055
Stratford	..	3,489	..	44,405	22,184	119,539	315	7,859
Whangamomona	..	739	2	7,449	1,406	88,892	19	403
Eltham	..	2,573	..	32,944	17,995	47,129	65	7,590
Waimate West	..	1,909	..	24,690	15,688	108,461 274,227	{ .. 11 ..	6,155
Hawera	..	3,255	..	35,938	16,385			7,153
Patea	..	3,763	..	37,649	11,499			3,644
Totals	..	26,405	6	298,160	134,241	764,592	1,350	50,660

Provincial District of Hawke's Bay.

Wairoa	..	6,711	..	29,455	3,245	647,477	7	1,901
Hawke's Bay	..	9,705	9	50,196	7,285	1,187,206	95	3,964
Waipawa	..	3,152	..	16,383	3,029	437,586	..	1,137
Waipukurau	..	869	..	4,298	765	91,212	..	221
Patangata	..	2,752	..	37,790	1,506	803,956	{ 116	360
Weber	..	490	..	5,036	725	281,606	150	81
Dannevirke	..	3,652	..	24,636	9,135	104,212	7	3,657
Woodville	..	1,577	..	15,404	5,711		..	2,379
Totals	..	28,908	9	183,198	31,401	3,553,255	375	13,700

* The Sheep Returns are compiled by the Agricultural Department, which arranges the counties as follows: Piako and part Matamata, 113,614; West Taupo and part Matamata, 8,337; Waitema and Ohura, 99,738.

NUMBER OF HORSES, CATTLE, PIGS, AND ANGORA GOATS, APRIL, 1911, AND SHEEP, APRIL, 1910—continued.

County.	Horses.	Asses and Mules.	Cattle (including Dairy Cows).	Dairy Cows (in Milk and Dry).	Sheep.	Angora Goats.	Pigs.
<i>Provincial District of Wellington.</i>							
Pahiatua	2,455	..	26,095	9,959	244,374	..	4,758
Akaroa	1,397	..	16,421	1,528	232,494	..	267
Eketahuna	1,346	..	12,974	5,821	98,521	10	2,432
Waimarino	1,496	..	6,232	1,386	164,326	..	609
Kaitieke	733	2	1,914	510	..	..	299
Waitotara	2,256	11	18,538	4,330	178,975	31	2,550
Wanganui	4,208	2	27,544	4,577	490,934	35	1,361
Rangitikei	8,608	7	48,529	10,198	943,294	19	3,832
Kiwitea	3,010	..	19,551	4,429	340,203	..	2,395
Pohangina	1,567	..	13,898	3,805	149,075	13	1,995
Oroua	3,147	6	18,396	8,772	170,212	..	4,269
Manawatu	4,108	3	28,121	11,971	149,705	17	6,963
Kairanga	4,045	1	28,025	11,216	116,305	8	5,804
Horowhenua	3,729	1	24,761	8,447	167,935	40	5,405
Masterton	4,306	1	34,021	3,855	595,252	7	1,574
Manireville	506	..	5,306	1,447	82,740	..	585
Castledown	855	..	14,712	441	185,129	..	128
Wairarapa South	2,637	4	25,442	7,598	195,937	39	3,857
Featherston	4,163	4	40,034	6,874	534,500	9	4,087
Hutt	2,867	30	11,026	4,876	154,214	139	1,493
Makara	3,019	2	4,704	2,701	84,672	26	1,912
Totals	60,458	74	426,244	114,741	5,278,797	393	56,575

Provincial District of Marlborough.

Sounds	..	314	..	2,780	974	172,037	29	1,475
Marlborough	..	6,421	..	12,763	4,624	686,532	569	3,991
Kaikoura	..	1,663	..	5,159	1,859	214,377	15	1,267
Totals	..	8,398	..	20,702	7,457	1,072,946	613	6,733

Provincial District of Nelson.

Collingwood	..	467	..	5,359	1,685	11,771	14	953
Takaka	..	1,032	..	5,217	2,432	44,244	88	1,907
Waimea	..	5,964	..	13,517	5,214	297,271	548	4,349
Buller	..	1,148	..	6,009	2,268	4,282	6	969
Inangahua	..	597	1	3,293	1,050	8,026	49	705
Murchison	..	662	..	4,824	1,265	28,043	..	707
Amuri	..	2,233	..	3,605	607	452,632	..	519
Cheviot	..	1,544	..	3,215	627	198,846	4	454
Totals	..	13,647	1	45,039	15,148	1,045,115	709	10,563

Provincial District of Westland.

Grey	..	1,435	1	7,529	2,223	24,408	14	1,510
Westland	..	2,343	..	17,085	4,427	25,445	5	1,096
Totals	..	3,778	1	24,614	6,650	49,853	19	2,606

NUMBER OF HORSES, CATTLE, PIGS, AND ANGORA GOATS, APRIL, 1911, AND SHEEP, APRIL, 1910—continued.

County.	Horses.	Asses and Mules.	Cattle (including Dairy Cows).	Dairy Cows (in Milk and Dry).	Sheep.	Angora Goats.	Pigs.
<i>Provincial District of Canterbury.</i>							
Waipara	2,530	..	2,997	767	900,921	..	622
Ashley	8,792	2	17,233	8,012		23	11,032
Tawera	844	..	992	396		..	488
Selwyn	1,482	..	1,289	527		..	709
Waimairi	2,461	2	5,507	3,637		10	4,613
Malvern	3,450	..	2,769	1,323		..	2,645
Papara	2,281	1	3,375	2,199	795,153	19	3,875
Heathcote	2,782	1	2,247	1,471		43	1,473
Halswell	1,042	1	3,665	2,061		..	1,173
Springs	1,573	..	4,326	2,835		..	2,955
Ellesmere	3,480	..	7,428	3,869		44	8,823
Mount Herbert	467	..	1,794	387		52	281
Akaroa	1,596	2	16,829	4,510	248,827	12	1,412
Wairewa	956	1	5,708	3,185		..	855
Ashburton	14,018	14	15,226	6,438	938,750	16	11,058
Geraldine	6,218	18	9,360	4,083		24	5,452
Levels	5,150	6	6,242	2,905	658,590	..	3,261
Mackenzie	2,564	5	3,392	1,009	485,614	1	976
Waimate	8,315	3	9,811	4,047	592,754	25	6,506
Totals	69,951	56	120,190	51,829	4,620,609	269	68,209

Provincial District of Otago.

OTAGO PORTION.

Waitaki	..	9,080	19	19,051	9,529	590,666	15	5,811
Waikamo	..	1,712	1	3,610	1,814	140,456	..	1,020
Waikouaiti	..	2,113	1	9,376	5,477	72,321	6	2,267
Taieri	..	7,481	3	20,042	8,749	214,757	..	5,277
Peninsula	..	939	..	4,767	3,449	5,075	..	831
Bruce	..	4,996	1	11,269	4,867	214,352	..	2,928
Clutha	..	6,519	7	16,587	6,646	351,993	..	3,644
Tuaspeka	..	5,073	2	7,260	2,367	441,451	..	1,831
Vincent	..	2,542	..	3,725	1,243	277,630	3	811
Lake	..	1,720	..	4,013	797	242,401	8	697
Maniototo	..	3,145	8	5,055	1,392	325,045	..	382
Totals	..	45,320	42	104,755	46,330	2,876,147	32	25,499

SOUTHLAND PORTION.

Southland	..	24,896	20	88,981	36,845	1,163,013	10	14,328
Wallace and Fiord	..	7,515	..	23,712	8,618	521,254	..	3,329
Stewart Island	..	47	..	189	87	3,021	..	14
Totals	..	32,398	20	112,882	45,550	1,687,288	10	17,671
Totals for Otago	..	77,718	62	217,637	91,880	4,563,435	42	43,170
Totals for Dominion	..	404,284	404	2,020,171	633,733	24,269,620	6,119	348,754

Sheep.

The returns made to the Department of Agriculture show a smaller number of sheep for the year 1886 than the census figures given previously, because the account was taken later in the year. The particulars are given for that year, and each of ten years, 1901-10, distinguishing the number in the North from that in the South Island.

According to these returns, the flocks of the North Island increased from 5,285,907 sheep in the year 1886 to 12,917,662 in 1910, or at the rate of 144 per cent., while sheep in the South Island increased from 9,888,356 to 11,351,958, a gain of 15 per cent. in the same period. For the North Island the increase during the twenty-four years was 7,631,755 sheep, and in the South Island 1,463,602.

Year.		North Island.	South Island.	Total.
1886	..	5,285,907	9,888,356	15,174,263
1901	..	10,218,945	10,014,154	20,233,099
1902	..	10,286,346	10,056,381	20,342,727
1903	..	9,433,831	9,520,722	18,954,553
1904	..	9,203,963	9,076,843	18,280,806
1905	..	9,388,605	9,742,270	19,130,875
1906	..	10,009,731	10,098,740	20,108,471
1907	..	10,854,018	10,129,754	20,983,772
1908	..	11,632,201	10,816,852	22,449,053
1909	..	12,193,211	11,287,496	23,480,707
1910	..	12,917,662	11,351,958	24,269,620

There was an increase of 4,036,521 in the total number of sheep between 1901 and 1910.

Of the provincial districts, that of Wellington had most sheep in 1910, Canterbury came next, and Otago occupied the third place. The full particulars, showing increases since 1909 to be general, with the exception of Canterbury and Otago, are given:—

Provincial District.	No. of Sheep in 1909.	No. of Sheep in 1910.	Increase or Decrease.
Wellington ..	4,997,548	5,278,797	281,249
Canterbury ..	4,627,769	4,620,609	- 7,160
Otago ..	4,586,733	4,563,435	- 23,298
Hawke's Bay ..	3,380,739	3,553,255	172,516
Auckland ..	3,097,974	3,321,018	223,044
Marlborough ..	1,010,040	1,072,946	62,906
Nelson ..	1,019,081	1,045,115	26,034
Taranaki ..	716,950	764,592	47,642
Westland ..	42,873	49,853	5,980
Totals ..	23,480,707	24,269,620	788,913

NUMBER OF FLOCKS, 1891, 1896, 1901, 1906, 1909, AND 1910.

Size of Flocks.		1891.	1896.	1901.	1906.	1909.	1910.
Under 500	..	8,272	12,028	11,700	11,793	12,389	11,564
500 and under 1,000	..	1,691	2,605	3,059	3,431	4,219	4,313
1,000	2,000	969	1,460	2,877*	3,340*	4,435*	4,791*
2,000	5,000	666	892				
5,000	10,000	287	340	397	394	510	544
10,000	20,000	239	231	189	213	227	233
20,000 and upwards	..	169	147	138	94	78	77
Totals	..	12,293	17,703	18,360	19,265	21,858	21,522

	1901.	1906.	1909.	1910.
* From 1,000 to 2,500	2,189	2,558	3,391	3,663
2,500 to 5,000	688	782	1,044	1,128
	2,877	3,340	4,435	4,791

The average size of the flocks is found to have been 1,081 sheep in 1896, 1,074 in 1909, and 1,127 in 1910.

The proportion of small flocks of sheep has increased very considerably, and with smaller flocks the rabbit difficulty should be easier to master than with large ones.

Crossbreds and other longwools comprise over 90 per cent. of the New Zealand flocks, the merino being less suited for freezing. The number of the different classes composing the flocks in April, 1910, was as follows:—

Stud—					
Merino	..	..	..	..	50,201
Lincoln	..	..	..	..	111,707
Romney	..	..	..	..	237,120
Border Leicester	..	..	..	..	101,998
English Leicester	..	..	..	..	105,458
Shropshire	..	..	..	..	31,607
Southdown	..	..	..	..	26,760
Other breeds	..	..	..	..	42,082
Total	..	..	..	..	706,933
Flock—					
Crossbreds and other longwools	..	..	..	..	21,680,235
Merino	..	..	..	..	1,882,452
Grand total	..	..	..	..	24,269,620

An interim return gives the number of sheep in New Zealand on the 30th April, 1911, as 23,996,126, a decrease of 273,494 during the year. In the North Island the number was 12,814,353, and in the South Island 11,181,773, a decrease of 103,309 in the North Island, and a decrease of 170,185 in the South Island.

The annual export and consumption of sheep during the last ten years has been :—

Year.	Export of Carcases Frozen Mutton and Lamb, including Pieces at 60 lb. to a Sheep.	Live Sheep ex- ported.	Estimated Consumption in the Dominion: Carcases.	Total
1900	3,055,135	3,840	1,800,000	4,858,975
1901	3,400,138	3,668	1,834,000	5,237,806
1902	4,084,578	48,047	1,904,000	6,036,625
1903	4,922,622	21,763	1,942,000	6,886,385
1904	4,017,829	7,430	1,998,000	6,023,259
1905	3,605,592	11,729	2,050,000	5,667,321
1906	4,274,637	13,324	2,137,000	6,424,961
1907	4,850,552	13,762	2,175,000	7,039,314
1908	4,404,969	6,317	2,233,000	6,644,286
1909	5,189,057	6,987	2,295,000	7,491,044
1910	5,460,193	6,335	2,354,000	7,820,528

It has been estimated that the annual consumption of mutton in New Zealand is equivalent to 2.25 sheep per inhabitant, and that the number of sheep required in the present year (1911) for food will be about 2,400,000. (Maoris, for the purposes of this calculation, have been included.)

The number of breeding-ewes in April, 1909, was 12,370,346, and in April, 1910, 12,515,380, an increase of 145,034 for the year. Figures for ten years are given :—

BREEDING-EWES.

1901	9,906,616	906	10,479,187
1902	9,610,149	1907	10,736,846
1903	9,071,751	1908	11,244,041
1904	9,222,448	1909	12,370,346
1905	10,070,184	1910	12,515,380

Two important advantages that sheep-farming has in New Zealand are (1) the low cost of the production of mutton, and (2) the high percentage of natural increase. With regard to the high percentage of increase, there need only be cited a few average returns

from well-known flocks to show what excellent lambings New Zealand farmers obtain under good management.

LAMBING RETURNS.—AVERAGES.

Locality.	Breed of Flock.	Breed of Rams.	Breed of Ewes.	No. of Ewes.	Percentage of Lambs.	Remarks.
North Island ..	Lincoln	Lincoln	Lincoln	7,517	81·04	Land merely surface-sown in English-grass pasture.
" ..	"	"	"	5,301	85·05	
" ..	Romney	Romney	Romney	1,141	96·17	
" ..	Lincoln	Southd'n	Lincoln	2,033	94·71	
South Island ..	Merino	Merino	Merino	14,765	75·36	Mountainous country in n'tive past're, unimproved.
" ..	"	B. Leic'str	"	4,235	88·94	
" ..	Cross-bred	"	Cross-bred	8,624	80·82	In English-grass pasture.
" ..	Half-bred	"	Half-bred	2,747	82·79	
" ..	B. Leic'str	"	B. Leic'str	778	90·77	
" ..	Lincoln	Lincoln	Lincoln	452	88·08	
" ..	R. Marsh	R. Marsh	R. Marsh	253	111·46	
" ..	E. Leic'str	E. Leic'str	E. Leic'str	464	93·34	
" ..	Shropshire	Shropshire	Shropshire	168	97·41	
" ..	Southd'n	Southd'n	Southd'n	114	96·87	

The above returns are fair average ones, but much higher might have been shown if exceptional cases had been selected.

Sheep in Australasia.

The number of sheep in the several States of the Commonwealth of Australia and in New Zealand for the years 1900, 1905, and 1910 was as follows:—

	1900.	1905.	1910.*
New South Wales ..	40,020,506	39,506,764	45,825,308
Victoria ..	10,841,790	11,455,115	12,937,983
Queensland ..	10,339,185	12,535,231	20,153,239
South Australia ..	5,283,247	6,202,330	6,432,038
Western Australia ..	2,434,311	3,120,703	5,157,658
Tasmania ..	1,683,956	1,583,561	1,735,000
New Zealand ..	19,355,195	19,130,875	24,269,620
Total for Australasia ..	89,958,190	93,534,579	116,510,846

* The figures for 1910 are taken from "Dalgety's Wool Review," the official figures not being received.

Sheep Flocks of the World.

The following figures show that the sheep flocks of the world have increased since 1895, but not so rapidly as the wool-using population. It is not possible in every case to obtain information

for uniform years to compare with 1895, therefore the latest figures available have been used.

Country.	Sheep.		Wool-using Population.	
	Latest Figures available.	1895.	Latest Figures available.	1895.
	Number.	Number.	Persons.	Persons.
Europe	177,757,834	198,194,214	458,682,099	396,387,000
Australasia ..	116,510,846	110,561,331	5,458,241	3,810,000
South America ..	92,345,267	102,847,134	47,714,839	28,867,000
North America ..	63,466,952	57,158,600	107,976,966	88,895,000
Africa	49,621,781	31,890,052	14,485,433	1,710,225
Asia	83,496,782	21,957,752	1,140,000	617,000
Other countries ..	..	..	..	50,000
Total	583,199,462	522,609,083	635,457,578	520,336,225

Wool.

Wool is the most important product of New Zealand. The annual value of the export is over a third of the value of the total exports of the Dominion, the figures for 1910 being—

Wool	£ 8,308,410
Total exports..	22,180,209

The following interesting information with reference to the wool-clip, the local sales, &c., is extracted from "Dalgety's Annual Wool Review" for the season ended 30th June, 1911. Referring to New Zealand, the Review states that in the North Island "the clip generally was disappointing, being shorter, more dusty, and generally out of condition, as compared with the previous year, and was not so well grown nor generally so attractive as the very excellent one of the preceding year, neither would the wools yield so well. A satisfactory feature of the clip, however, was the increased attention paid by farmers to the skirting and grading of the fleeces, and in this they have been encouraged and assisted by the technical schools, under whose auspices wool-classing instruction is given.

"A mild winter and good rainfall were responsible for the offering of a certain quantity of sound, well-grown, bright wool in the first part of the season, but at later sales much of the wool being from new bush country was dingy and bush-stained.

"The average weight cut, contrary to expectations, was much lighter than in the previous season, owing to the growth of the

wool and the rise of the yolk having been retarded by heavy winter rains and dry northerly winds during the early spring.

"In the South Island the Canterbury clip was adversely affected by the exceptionally dry weather experienced during the spring, and the wools from the plains were gritty and dusty, owing to dry weather and high winds.

"The North Otago and Central Otago clips were, as a rule, earthy and discoloured, and many of the southern wools gave evidence of dry and windy weather. There were, of course, exceptions, for in some isolated districts feed was plentiful, and the clip up to the standard of the year before."

The oversea shipments from Australasia for the year ending 30th June, 1911, total 820,012,449 lb., as compared with 816,861,665 lb. in the previous year.

The shipment figures from each State compare as under with the previous season :—

—	1910-11.		1909-10.	
	Bales.	Lb.	Bales.	Lb.
States—				
New South Wales ..	923,831	304,864,230	931,208	307,598,640
Victoria ..	501,835	160,085,365	510,343	165,968,475
Queensland ..	281,352	92,283,456	238,722	78,092,094
South Australia ..	174,639	56,932,314	160,573	52,206,225
Western Australia ..	73,395	27,449,730	63,555	23,833,329
Tasmania ..	20,326	5,223,782	17,304	5,018,160
Commonwealth ..	1,975,378	646,838,877	1,921,705	632,716,923
New Zealand ..	493,372	173,173,572	512,938	184,144,742
Australasia ..	2,468,750	820,012,449	2,434,643	816,861,665

Increase, 34,107 bales, or 3,150,784 lb.

The average value per pound of all the wool sold in Australasia during the past twelve months was 9½d., as compared with 9¼d. for the previous year. The average for the past four years has been 9d.

The selling season in New Zealand, which opened in Wellington on 8th November and closed in Dunedin on 7th March, was a rather disappointing one, inasmuch as the total sales showed a falling-off of 47,000 bales as compared with the corresponding period of the preceding year. This reduction in the sales was principally due to the effects of the drop in values which occurred in January last. Most of the wool in the Dominion is not ready for market until after Christmas, and the unexpected fall referred to not only led to heavy withdrawals at auction, but resulted in many owners reverting to shipping. Moreover, the season's clip from the Dominion was not up to the high standard of excellence of that of 1909-10, and, further, a decrease in production resulted owing to the adverse season and consequent poor growth of the wool.

Table of Rates.

The following table setting out the prices ruling at the different auctions held in Wellington and Dunedin is perhaps the best indication as to how values ruled at the New Zealand sales, as, naturally, with the same buyers attending in each centre and sales following one another at very short intervals, the position of the market was reflected at the various selling centres.

PRICES CURRENT AT THE WELLINGTON SALES, SEASON 1910-11.

Description.	November 8.		November 28.		January.		February.	
	Per lb.		Per lb.		Per lb.		Per lb.	
	d.	d.	d.	d.	d.	d.	d.	d.
Merino—								
Super	..	..	..	..	10½ to 10¾	..	..	..
Medium	..	..	10½ to 10¾	..	9½ to 10	9	to	9½
Half-bred—								
Super	10	to 10½	11	to 12	10½ to 11½	10½		
Medium	10	to 10½	10	to 10¾	9½ to 10	9	to	9½
Crossbred—								
Super	9	to 10½	9½ to 11¼	..	9½ to 11	10	to	11
Medium	7½ to 8½	..	8½ to 9	..	8 to 8½	7½ to 8½	..	..
Inferior and coarse	7½	..	7½ to 8½	..	7 to 7½	6½ to 7	..	..
Shropshire	..	..	10½ to 11	..	9 to 9½	..	..	..
Pieces	5½ to 8½	..	5½ to 9	..	6 to 7½	5 to 7	..	..
Bellies	5½ to 7½	..	5½ to 7½	..	5½ to 6½	5½ to 6½	..	..
Stained pieces and locks	2½	..	4½ to 4¾	..	3½ to 4	3½ to 3¾	..	..
Crutchings	4½ to 5½	..	6 to 6½	..	4½ to 5½	3½ to 5½	..	..
Neck-pieces	7½ to 8½	..	9	..	7½	..	..	..
Dead	7½ to 8½	..	8½	..	..	..	..	..
1st lambs	..	..	..	..	..	8½ to 9½	..	..
2nd lambs	..	..	..	..	..	7 to 8	..	..
Lambs, inferior	..	..	..	..	..	4½ to 6½	..	..

PRICES CURRENT AT THE DUNEDIN SALES, SEASON 1910-11.

Description.	December.		January.		February.	
	Per lb.		Per lb.		Per lb.	
	d.	d.	d.	d.	d.	d.
Merino—						
Super	11	to 12½	10½ to 12	..	10½	..
Medium	9	to 10½	8½ to 9½	..	8½ to 9½	..
Inferior	8	to 8½	6½ to 7½	..	6½ to 8½	..
Half-breds—						
Super	12	to 13	11 to 12½	..	11	..
Medium to good	10	to 11¼	8½ to 10½	..	9 to 10½	..
Inferior	8½	to 9½	6½ to 7½	..	8 to 9	..
Crossbreds—						
Super	10½ to 11	..	9½ to 11	..	10½ to 11½	..
Medium	9 to 10	..	7½ to 8½	..	8½ to 9½	..
Inferior	7 to 8½	..	5½ to 6½	..	6½ to 7½	..
Pieces—						
Super	9½ to 11½	..	8½ to 10½	..	9 to 10½	..
Medium	8½ to 9	..	7 to 7½	..	7 to 8½	..
Heavy	6½ to 7½	..	5½ to 6½	..	5½ to 6½	..

AMOUNT OF WOOL USED FOR MANUFACTURING PURPOSES IN 1910.

United Kingdom	..	..	..	492,000,000	pounds
United States..	..	..	..	480,000,000	"
France	..	..	..	457,000,000	"
Germany	..	..	..	380,000,000	"
Austria-Hungary	..	..	..	132,000,000	"
Italy..	..	..	..	57,000,000	"
				1,998,000,000	"

— Cattle.

The cattle as enumerated in 1911 for each provincial district are given in the next table, and show an increase over the figures for 1908-9 of 246,845.

SUMMARY OF PROVINCIAL DISTRICTS.

Provincial District.	Bulls (all Ages).	Dairy Cows (in Milk and Dry).	Heifers to calve next Season intended for Dairying.	All other Kinds.	Totals.
Auckland	13,114	180,386	59,411	431,476	684,387
Taranaki	6,358	134,241	31,616	125,945	298,160
Hawke's Bay	2,976	31,401	8,781	140,040	183,198
Wellington	8,255	114,741	31,212	272,036	426,244
Marlborough	543	7,457	1,981	10,721	20,702
Nelson	1,142	15,148	4,080	24,669	45,039
Westland	418	6,650	2,088	15,458	24,614
Canterbury	2,837	51,829	11,506	54,018	120,190
Otago: Otago prtn.	2,536	46,330	8,620	47,269	104,755
Southland	2,691	45,550	11,050	53,591	112,882
Otago: Southland portion					
Totals	40,870	633,733	170,345	1,175,223	2,020,171

No comparison is possible with the 1908 figures, as the classification is not the same.

The large increase in cattle is fairly evenly distributed, the only district showing a decrease being the Otago portion of the Otago District. The following table shows the respective increases, &c., of provincial districts:—

Provincial District.	Increase.	Decrease.
Auckland	93,531	..
Taranaki	40,767	..
Hawke's Bay	15,907	..
Wellington	47,040	..
Marlborough	3,958	..
Nelson	7,827	..
Westland	2,954	..
Canterbury	19,273	..
Otago: Otago portion	..	6,367
Southland portion..	22,955	..
Totals	253,212	6,367
Total increase	246,845	

Out of a total of 2,020,171 cattle, the North Island is shown to have had 1,591,989, or 79 per cent., while the South Island had 428,182, or 21 per cent. The dairy cows and heifers intended for dairying in the North Island numbered 591,789, or 74 per cent., and in the South Island 212,289, or 26 per cent.

In order to encourage dairy-farmers to improve the quality of their herds, the Government has imported purebred cattle of well-known milking strains, the progeny of which will be sold to the public from time to time.

To further encourage dairymen to improve their herds by testing the respective merits of individual cows, the Dairy-produce Division of the Department of Agriculture, with the co-operation of the Dalefield Dairy Company, established a cow-testing association amongst the members of that company in the spring of 1909. In the past many errors of judgment have been made in culling, and the object of the association is to grade the herds up to a higher producing capacity and to ensure more accurate information regarding the yield of individual cows. Dairymen cannot be certain of the respective merits of their individual cows unless the yield of milk and percentage of fat are both considered. The results proved satisfactory, clearly demonstrating the value of such associations, and since then several other cow-testing associations have been formed.

Dairy-produce.

The Dairy Industry Act, 1908, is a consolidation of all previous legislation in force in New Zealand on the subject. The Act provides for the appointment of inspectors of dairy stock and factories or other places used for the manufacture of dairy-produce, and power is given to condemn or forbid their use, if necessary. The sale of unwholesome milk or other dairy-produce is prohibited, and provision is made for the inspection, grading, and shipping of all such produce exported. Provision is made for the framing of regulations for the registration of dairies, licensing of persons carrying on the manufacture or sale of the produce, registration of trade marks or brands, and for inspection and grading. A fine not exceeding £50 may be inflicted for any offence under this part of the Act.

Authority is given under Part II of the Act for Government advances to dairy companies, on the security of their assets, for the purposes of acquiring land, erecting buildings and machinery for carrying on the manufacture of dairy-produce. Loans are repayable by equal half-yearly instalments within fifteen years, and bear interest at the rate of 5 per cent. per annum.

Part III provides for the registration of co-operative dairy companies, and shareholders are protected in the event of certain contingencies.

The total quantity of butter exported during the year ending 31st March, 1911, was 41,199,088 pounds. The estimated consumption in New Zealand at twenty pounds per head of population per annum equals 20,818,360 pounds. Adding the quantity

consumed locally to the quantity exported, the estimated total production of butter for the year would equal 62,017,448 pounds.

The estimated consumption of cheese for the year ended 31st March, 1911, allowing three pounds per inhabitant, was 3,122,754 pounds, and the total quantity exported was 51,113,552 pounds, making a total production of 54,236,306 pounds for the above period. An appreciable quantity of cheese is made at private factories and dairies of which no record has been obtained.

The number of butter and cheese factories in each provincial district as in April, 1911, with the output for the previous year, is next shown :—

Provincial District.	Number of Factories.		Skimming-stations.	Output.	
	Butter.	Cheese.		Butter.	Cheese.
				Tons.	Tons.
Auckland	52	18	138	8,852	949
Taranaki	56	56	82	6,935½	10,038½
Hawke's Bay	18	11	27	1,281½	584
Wellington	31	43	90	5,626	4,509½
Marlborough	2	7	..	46	557½
Nelson	6	4	6	283	227
Westland	4	1	4	195	39
Canterbury	8	11	36	1,728½	693
Otago and Southland	8	67	48	1,641	6,368½
Totals, 1911	185	218	431	26,588½	23,966
" 1910	189	194	417	24,601½	24,037
" 1909	193	152	419	21,155½	17,685
" 1908	196	147	438	19,782	15,514½
" 1907	212	109	463	23,989	10,312
" 1906	211	82	460	22,466½	7,671
" 1905	298		448	22,108½	5,121
" 1904	284		444	20,707	5,853½
" 1903	272		380	18,035½	5,038
" 1902	254		276	14,716½	5,600½

In addition to the above, in April, 1911, there were 272 private dairies for butter and 18 for cheese, also 84 packing-houses.

Horses.

The increase in horses is shown for six census years :—

Census Years.	Number of Horses.	Numerical Increase.	Increase per Cent.
1880	1,738,232	23,658	12.63
1891	2,110,400	26,378	12.50
1896	2,374,180	28,827	12.14
1901	2,662,450	60,292	22.65
1906	3,255,370	77,747	23.81
1911	4,042,840		

At the enumeration made in April, 1911, the number of horses was found to have increased to 404,688 (including 404 mules and asses), for which particulars are given. It will be seen that the Provincial District of Auckland had by far the most horses, Otago and Canterbury following, Wellington taking fourth place.

SUMMARY OF TOTALS.

Provincial District.	Entires (all Ages).	Geldings over Two Years Old.	Mares over Two Years Old.	Colts and Fillies under Two Years Old.	Total Horses (including Asses and Mules).
Auckland..	1,245	48,550	45,843	19,578	115,216
Taranaki..	182	10,319	11,931	3,979	26,411
Hawke's Bay	280	12,063	12,050	4,524	28,917
Wellington	597	25,331	26,514	8,090	60,532
Marlborough	71	3,526	3,717	1,084	8,398
Nelson ..	132	5,804	5,936	1,776	13,648
Westland..	59	1,544	1,507	669	3,779
Canterbury	678	29,523	29,966	9,840	70,007
Otago: Otago portion	373	18,591	19,559	6,889	45,862
" Southland portion ..	201	13,132	14,081	5,004	32,418
Totals { 1911 ..	3,818	168,383	171,104	61,383	404,688*
{ 1908 ..	3,407	155,586	153,298	51,487	363,778*
Increase ..	411	12,797	17,806	9,896	40,910

* The totals include 404 asses and mules for 1911, and 519 for 1908.

Increase for horses .. 41,025.

Decrease for asses and mules .. 115.

The export of horses from New Zealand during the year 1910 was: To Victoria, 2,294; Fiji, 193; New South Wales, 3,030; Tasmania, 29; United Kingdom, 1; Bengal, 57; Uruguay, 20; and South Sea Islands, 26: a total of 5,650.

PIGS AND ANGORA GOATS.

Provincial District.	Pigs.			Goats.		
	1911.	1908.	Increase.	1911.	1908.	Increase.
Auckland	96,538	71,895	24,643	2,349	882	1,467
Taranaki	50,660	50,265	395	1,350	363	982
Hawke's Bay	13,700	8,746	4,954	375	336	39
Wellington	56,575	44,472	12,103	393	45	348
Marlborough	6,733	3,146	3,587	613	265	348
Nelson	10,563	6,865	3,698	709	527	182
Westland	2,606	1,782	824	19	5	14
Canterbury	68,209	32,073	36,136	269	64	205
Otago: Otago portion	25,499	15,773	9,726	32	..	32
Southland portion	17,671	10,075	7,596	10	2	8
Totals	348,754	245,092	103,662	6,119	2,494	3,625

Poultry.

Poultry-farming as an organized industry in New Zealand is as yet in its infancy, but as population increases and a better knowledge of the business is acquired it will no doubt assume the position it occupies at present in older countries. It can be conducted profitably as an adjunct to other branches of farming, particularly wheat-growing and dairying.

An expert is employed by the State for the purpose of giving instruction as to the best methods of breeding and rearing. Three breeding-stations have been established—at Ruakura, near Auckland; Burnham, near Christchurch; and Milton, near Dunedin—where a limited number of students are received and instructed. No charge is made for teaching, but all other expenses must be borne by the student. Full particulars as to conditions, &c., are obtainable from the managers at the stations, or on application to the Department.

The annual output of poultry and eggs has so far been disposed of locally and to ocean-going steamers, the export being practically *nil*. An account was taken at the census of 1911 of the number of each kind of poultry kept at the time the record was obtained, with the following result:—

	Number.
Fowls.. .. .	3,214,045
Ducks	329,163
Turkeys	97,884
Geese	45,311
Other kinds	5,554
Total	3,691,957

Bee-farming.

In order to encourage the above industry model apiaries have been established at Ruakura and Waerenga in charge of expert bee-keepers, whose duties include the instruction of persons desirous of becoming students of bee culture.

Intending students should make application to the Department of Agriculture to be allowed to enter the above apiaries. There is no distinction as to sex nor limit as to age. The student must find and bear the expense of accommodation in the neighbourhood of the farm attended, and upon entering must sign an undertaking to attend regularly and observe the rules laid down by the instructor. At the end of the season students are examined, and if found competent to undertake commercial bee-keeping are given a certificate to that effect.

At the census of 1911 it was ascertained that there were at that time 11,002 bee-keepers and 71,584 hives in New Zealand. The output of honey for the previous year was stated at 1,457,272 lb. and of wax at 28,061 lb.

The quantity of honey exported during 1910 was 86,143 lb., valued at £1,731, the United Kingdom taking 82,206 lb., valued at £1,625.

Live-stock in Australasia.

The following gives the number of the principal kinds of live-stock in Australasia for the year 1909-10 :—

Country.	Sheep.	Cattle.	Horses.	Pigs.
New South Wales	46,202,578	3,027,727	604,784	237,849
Victoria	12,937,983	1,549,640	442,829	217,921
Queensland	19,593,791	4,711,782	555,613	124,803
South Australia	6,475,431	758,080	253,884	81,797
Western Australia	4,731,737	793,217	125,315	47,062
Tasmania	1,734,761	199,945	40,492	55,705
New Zealand	April, 1910. 24,269,620	April, 1911. 2,020,171	April, 1911. 404,284	April, 1911. 348,754

New Zealand thus takes second place in order for number of sheep, and third for the number of cattle.

SECTION XVII.—AGRICULTURE

IN 1895 the duty of collecting agricultural statistics devolved upon the Department of Agriculture. The plan adopted is similar to that used in the United Kingdom, the account of land laid down in crop being made up at an early date, while estimates of produce are made after the results of threshing are known.

The Department did not collect full statistics for the season 1909-10, but the area under the principal grain and root crops was ascertained and an estimate made of the yields of grain. The figures for 1910-11 are census returns.

Remarks on the progress of agriculture in New Zealand, in respect of all its features in detail, are supplied in the special article devoted to the subject which appears in Section II of Part III.

YIELDS OF WHEAT, OATS, BARLEY, AND POTATOES FOR 1910-11.—SUMMARY OF PROVINCIAL DISTRICTS.

Provincial District.	Wheat.*			Oats.*			Barley.*			Potatoes.		
	Acres.	Yield per Acre, in Bushels.	Total Produce, in Bushels.	Acres.	Yield per Acre, in Bushels.	Total Produce, in Bushels.	Acres.	Yield per Acre, in Bushels.	Total Produce, in Bushels.	Acres.	Yield per Acre, in Tons.	Total Produce, in Tons.
Auckland	1,552	25	38,800	5,444	30	163,320	1,092	33	36,036	4,910	4	19,640
Taranaki	735	27	19,845	2,663	32	85,216	657	38	24,966	506	5	2,530
Hawke's Bay	1,261	22	27,742	5,778	29	167,562	1,283	41	52,603	1,245	5.5	6,847
Wellington	6,443	28	180,404	15,569	34	529,346	1,322	42	55,524	2,317	5.5	12,743
Marlborough	2,948	28	82,544	3,003	36	108,108	11,891	25	297,275	513	5	2,565
Nelson	5,466	27	147,582	7,120	29	206,480	3,204	26	83,304	896	4.5	4,032
Westland	..	..	..	234	33	7,722	..	..	..	42	5	210
Canterbury	229,876	26	5,976,776	112,673	31	3,492,863	9,565	27	258,255	9,435	5	47,175
Otago—	..	..	..	..	..	..	..	..	..	..	..	..
Otago portion	62,171	23	1,429,933	65,542	30	1,966,260	3,574	25	89,350	6,124	4.5	27,558
Southland portion	11,715	33	386,595	84,801	40	3,392,040	903	33	29,799	3,035	6	18,210
Totals	322,167	25.73	8,290,221	302,827	33.41	10,118,917	33,491	27.68	927,112	29,023	4.87	141,510

* For threshing only.

The following table shows the acreage and actual yield of corn and pulse crops, grasses, &c., for the years 1901-2, 1910-11.

TOTALS FOR DOMINION.

Year.	Wheat.*			Oats.*			Barley.*			Rye.*			Maize.*		
	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.
1901-2	163,462	24.76	4,046,589	405,924	37.03	15,045,233	26,514	32.28	855,993	1,030	25	27,250	12,503	45.77	571,834
1902-3	194,355	38.37	7,457,915	483,659	45	21,766,708	27,921	40.69	1,136,232	1,279	30	38,370	12,038	50.48	607,609
1903-4	230,346	34.26	7,891,654	391,640	38.57	15,107,237	34,681	33.46	1,160,504	1,176	17	19,992	11,156	47.53	530,291
1904-5	258,015	35.36	9,123,673	342,189	42.53	14,553,611	29,484	38.26	1,128,164	1,129	28	31,612	10,084	48.63	490,405
1905-6	222,183	30.60	6,798,934	354,291	35.86	12,707,982	29,644	34.54	1,024,045	1,397	38	63,086	10,485	60.39	633,212
1906-7	206,185	27.18	5,605,252	351,929	31.83	11,201,789	33,305	31.08	1,035,346	1,298	32	41,536	8,869	45.83	406,491
1907-8	193,031	28.54	5,567,139	386,885	38.82	15,021,861	36,177	32.15	1,163,406	2,958	23.9	70,702	8,869	56.74	503,301
1908-9	252,391	34.75	8,772,790	406,908	46.46	18,906,738	48,853	39.67	1,938,452	3,506	26	91,156	11,522	61.95	713,838
1909-10	311,000	28	8,661,100	377,000	37	13,804,000	41,500	31	1,304,000						
1910-11	322,167	25.73	8,290,221	302,827	33.41	10,118,917	33,491	27.68	927,112	4,395	24.18	106,271	13,057	43.64	569,807
Year.	Peas.*			Beans.*			Rye-grass.			Cocksfoot.			Potatoes.		
	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Pounds.	Total Pounds.	Acres.	Yield per Acre, in Tons.	Total Tons.
1901-2	7,242	22.88	164,712	3,504	25.65	88,905	16,244	21.97	356,765	27,876	160.76	4,481,340	31,259	6.61	206,815
1902-3	8,600	34.96	300,675	3,037	29.71	90,846	27,881	20.69	576,931	27,884	243.39	6,786,844	31,408	6.15	193,267
1903-4	10,328	30.15	311,412	2,646	29.64	78,421	29,350	22.43	658,280	29,590	176.70	5,228,572	31,778	6.57	208,787
1904-5	11,426	33.09	378,195	2,545	35.34	89,964	31,622	22.95	758,387	37,707	223.90	8,890,775	26,331	5.11	134,608
1905-6	13,211	29.89	394,903	2,054	33.21	68,222	30,636	32.23	987,243	37,039	237.14	8,783,571	26,834	4.59	123,402
1906-7	11,519	29.21	336,452	1,960	37.39	73,299	25,893	22.87	579,399	31,633	183.19	5,795,915	31,289	5.42	129,875
1907-8	8,416	28.78	242,245	1,168	37.6	43,923	40,435	28.69	1,160,413	28,731	144.37	4,147,902	27,035	5.28	142,990
1908-9	6,998	42.77	299,162	1,251	41.65	52,116	50,126	32.53	1,630,615	32,705	144.35	4,721,159	29,919	6.52	195,206
1909-10							56,550	33	1,894,650	29,500	131	4,451,000	30,500	6	180,509
1910-11	14,829	34.50	511,600	1,798	40.13	72,150	46,706	25	1,167,650	41,918	140	5,868,520	29,023	4.87	141,510

* For threshing only.

AREA IN CULTIVATION AND IN OCCUPATION, 1910-11.

Provincial District.	In Grain and Pulse Crops.	In Green and Root Crops.	In Fallow Land.	In Sown Grasses: Land ploughed. (For all purposes.)	In Sown Grasses: Land not ploughed. (For all purposes.)	In Hay: Area included in two previous Columns.	In Orchard and Vineyard.	In Garden (Private).	In Plantation. (Not Native Bush.)	Total Area in Cultivation.	In Tussock or Native Grass and Unimproved Land.	Total Area in Occupation.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Auckland ..	52,811	57,502	56,201	802,262	2,541,999	16,890	12,035	3,435	20,401	3,546,646	4,222,402	7,769,048
Taranaki ..	11,984	23,982	3,274	211,189	793,385	12,397	953	610	1,332	1,046,709	311,562	1,358,271
Hawke's Bay	22,819	35,573	7,281	356,925	1,405,543	3,874	2,421	1,098	3,810	1,835,470	1,375,616	3,211,086
Wellington	49,327	58,799	7,183	357,980	2,699,664	10,149	3,646	2,745	5,463	3,184,807	1,249,948	4,434,755
Marlborough	36,344	11,614	3,189	100,255	421,898	1,243	592	272	1,927	576,091	1,864,018	2,440,109
Nelson ..	32,071	18,475	5,445	139,318	418,063	2,594	4,894	662	4,544	623,472	1,690,644	2,314,116
Westland ..	668	1,524	778	9,903	73,768	470	208	85	14	86,948	874,120	961,068
Canterbury	474,503	228,936	64,708	1,455,519	507,446	6,344	3,943	3,715	18,112	2,756,882	3,830,705	6,587,587
Otago—												
Otago portion ..	193,994	136,995	40,220	818,416	227,346	5,927	3,081	1,685	6,851	1,428,588	6,569,364	7,997,952
Southland portion	141,301	140,282	21,694	748,459	125,403	2,712	960	852	1,326	1,180,277	1,983,857	3,164,134
Totals ..	1,015,822	713,682	209,973	5,000,226	9,214,515	62,600	32,733	15,159	63,780	16,265,890	23,972,236	40,238,126

LAND IN CULTIVATION.—ACREAGE UNDER CROP, FALLOW LAND, SOWN GRASSES, ETC., FOR EACH COUNTY AS AT THE 1ST JANUARY, 1911.

County.	Total under Crop.	Fallow Land.	In Sown Grasses, Land ploughed.	In Surface Sown Grasses, Land not ploughed.	In Orchard and Vineyard.	In Garden.	Plantation.	Total Area under Cultivation.
<i>North Island.</i>								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Mangonui ..	859	332	9,590	31,946	151	57	4	42,939
Whangaroa ..	244	186	794	9,179	71	42	9	10,525
Hokitanga ..	1,319	481	3,348	81,418	389	174	54	87,183
Bay of Islands ..	1,465	871	8,023	50,456	216	78	16	61,125
Whangarei ..	1,899	1,914	30,461	139,997	1,124	107	76	175,578
Hobson ..	935	1,314	4,996	90,171	162	100	145	97,823
Otamatea ..	1,058	1,181	8,753	103,319	282	85	37	114,715
Rodney ..	1,323	2,095	17,776	102,884	1,427	125	149	125,779
Waitemata ..	2,233	5,293	29,930	43,310	2,945	351	367	84,429
Eden ..	517	442	14,253	14,246	460	680	127	30,725
Manukau ..	13,814	11,365	138,965	73,633	1,024	301	951	240,053
Coromandel ..	271	77	3,343	23,443	90	73	8	27,805
Thames ..	855	435	7,225	11,098	310	80	17	20,020
Waikato ..	8,584	5,926	75,012	48,269	728	164	5,427	144,110
Raglan ..	3,244	2,781	28,510	147,219	213	65	113	182,145
Waipa ..	10,081	3,941	78,650	21,687	384	112	466	115,321
Kawhia ..	226	135	1,041	48,849	49	22	6	50,328
Waitomo ..	3,083	2,833	21,734	87,019	148	69	91	114,977
Awakino ..	364	8	699	59,328	18	13	1	60,431
Ohinemuri ..	2,161	1,063	15,233	15,679	119	107	84	34,446
Piako ..	7,749	3,413	70,314	28,765	232	58	408	110,939
Matamata ..	9,894	5,262	91,186	19,807	116	61	651	126,977
Tauranga ..	9,597	1,596	54,403	32,637	549	86	343	99,211
Rotorua ..	1,092	406	7,240	24,791	81	57	9,937	43,604
East Taupo ..	715	46	1,897	2,475	13	12	518	5,676
West Taupo ..	3,387	896	13,907	21,791	14	17	35	40,047
Ohura ..	526	30	197	62,833	54	28	3	63,671

LAND IN CULTIVATION.—ACREAGE UNDER CROP, FALLOW LAND, SOWN GRASSES, ETC.—continued.

County.	Total under Crop.	Fallow Land.	In Sown Grasses, Land ploughed.	In Surface Sown Grasses, Land not ploughed.	In Orchard and Vineyard.	In Garden.	Plantation.	Total Area under Cultivation.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Whakatane	2,162	811	11,672	25,582	83	18	14	40,342
Opotiki	3,427	319	15,669	58,092	118	32	28	77,685
Waipapu	5,057	69	654	273,575	30	31	31	279,447
Cook	9,872	529	31,699	467,904	378	194	199	510,775
Waikahu	2,300	151	5,088	320,597	57	36	86	328,315
Clifton	2,772	315	17,601	95,310	109	42	24	116,173
Taranaki	9,302	1,122	53,259	101,095	341	245	462	165,826
Egmont	4,170	212	18,579	73,363	84	33	134	96,575
Stratford	5,680	295	14,226	141,286	84	79	105	161,755
Whangamomona	129	14	1,163	73,796	36	17	5	75,160
Eltham	3,129	412	11,270	73,152	74	56	100	88,193
Waimate West	2,629	246	18,093	24,608	40	25	69	45,710
Hawera	2,621	190	30,727	59,921	71	58	193	93,781
Patea	5,534	468	46,271	150,854	114	55	240	203,536
Wairoa	6,626	342	14,655	393,581	103	57	144	415,508
Hawke's Bay	19,949	3,173	169,151	290,299	1,778	641	1,783	486,774
Waipawa	16,726	1,673	57,644	152,007	116	83	706	228,955
Waipukurau	3,189	286	26,862	12,873	43	59	267	43,579
Patangata	3,914	494	68,273	247,275	71	60	655	320,742
Dannevirke	4,796	735	13,958	161,874	123	135	138	181,759
Weber	271	185	599	61,483	23	11	51	62,623
Woodville	2,921	393	5,783	86,151	164	52	66	95,530
Pahiatua	2,025	219	4,663	149,539	208	111	116	156,881
Akatio	542	22	719	137,488	50	26	68	138,915
Eketahuna	1,311	59	1,499	71,881	70	35	71	74,926
Waimarino	1,197	42	661	71,363	29	28	99	73,419
Kaitieke	447	14	336	32,138	39	22	2	32,998

North Island—continued.

Waitotara ..	3,040	291	24,429	103,584	184	82	90	131,700
Wanganui ..	3,828	415	17,772	207,759	219	304	332	230,629
Rangitikei ..	23,680	1,141	74,352	324,036	470	289	975	424,943
Kiwitea ..	4,400	269	9,402	160,471	137	60	157	174,896
Pohangina ..	1,523	147	1,989	94,329	97	19	63	98,167
Oroua ..	7,860	613	17,829	84,058	248	94	164	110,866
Manawatu ..	13,453	850	46,741	52,596	186	186	545	114,557
Kairanga ..	4,361	477	21,485	66,501	422	175	311	93,732
Horowhenua ..	4,957	461	12,090	105,251	342	259	224	123,584
Masterton ..	12,498	822	36,939	317,066	209	276	449	368,259
Mauriceville ..	520	30	1,595	45,118	33	8	27	47,331
Castlepoint..	479	10	3,640	114,656	30	20	154	118,989
Wairarapa South ..	7,853	291	24,930	149,525	144	61	255	183,059
Featherston ..	12,196	790	49,993	246,918	305	151	1,130	311,483
Hutt ..	1,288	112	4,931	104,507	191	446	127	111,602
Makara ..	668	108	1,985	60,880	33	93	104	63,871
Totals for North Island ..	312,797	73,939	1,728,356	7,440,591	19,055	7,888	31,006	9,613,632

South Island.

Sounds ..	360	21	503	91,580	64	17	35	92,580
Marlborough ..	43,646	2,631	72,616	266,914	472	220	1,805	388,304
Kaikoura ..	3,952	537	27,136	63,404	56	35	87	95,207
Collingwood ..	175	40	1,921	19,899	76	19	4	22,134
Takaka ..	1,100	352	5,176	33,561	187	16	7	40,399
Waima ..	23,462	2,406	32,876	185,710	4,215	409	532	249,610
Buller ..	192	95	2,006	15,720	155	50	3	18,221
Inangahua ..	441	256	4,527	8,230	72	41	1	13,568
Murchison ..	513	164	778	28,094	45	12	3	29,609
Amuri ..	15,135	1,813	53,329	80,581	57	70	3,298	154,283
Cheviot ..	9,528	319	38,705	46,268	87	45	696	95,648
Grey ..	863	321	6,471	24,514	128	47	..	32,344
Westland ..	1,329	457	3,432	49,254	80	38	14	54,604

LAND IN CULTIVATION.—ACREAGE UNDER CROP, FALLOW LAND, SOWN GRASSES, ETC.—continued.

County.	Total under Crop.	Fallow Land.	In Sown Grasses, Land ploughed.	In Surface Sown Grasses, Land not ploughed.	In Orchard and Vineyard.	In Garden.	Plantation.	Total Area under Cultivation.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Waipara ..	23,509	1,943	101,688	102,963	67	74	902	231,146
Tavora ..	5,440	949	10,224	15,337	17	17	140	32,124
Ashley ..	74,567	6,041	174,287	76,699	392	330	1,099	332,395
Selwyn ..	21,348	2,038	65,053	3,869	39	51	1,552	93,950
Waimairi ..	4,331	531	12,082	1,354	612	655	220	20,385
M. Jern ..	51,462	4,029	94,035	2,114	115	138	2,110	154,083
Paparu ..	15,490	947	17,193	758	114	112	190	34,304
Heathote ..	422	263	3,885	2,333	277	392	146	7,718
H. Iswell ..	3,263	152	9,355	3,678	69	113	193	16,823
Springs ..	13,055	1,497	24,550	2,675	45	48	186	42,056
Ellesmere ..	32,982	2,528	50,905	1,335	215	78	797	88,840
Mount Herbert ..	310	45	8,599	20,348	90	12	109	29,513
Akaroa ..	62	..	8,379	88,800	144	58	164	97,607
Waipara ..	2,404	122	8,764	52,545	56	33	154	64,078
Ashburton ..	203,661	14,542	408,830	22,182	427	586	5,716	655,944
Geraldine ..	67,705	5,654	133,784	47,842	301	311	1,769	257,366
Levells ..	52,760	5,722	74,033	6,989	323	290	922	141,039
McKenzie ..	24,022	1,609	61,546	19,638	150	52	572	107,589
Waimate ..	106,046	16,096	188,327	36,987	490	385	1,091	349,422
Waitaki ..	85,529	9,707	179,412	53,251	390	313	986	329,588
Waihero ..	12,648	554	33,561	9,880	54	49	107	56,853
Waikouaiti ..	6,669	465	19,064	42,378	146	132	164	69,018
Taieri ..	25,551	2,119	81,378	16,300	302	368	401	126,419
Peninsula ..	1,375	108	2,839	13,129	50	169	70	17,740
Bruce ..	42,968	3,215	98,177	9,241	131	135	447	154,314
Clutha ..	62,728	6,038	168,885	41,947	191	151	519	280,459

South Island—continued.

Tuapeka ..	44,947	3,308	113,033	26,153	998	141	3,377	191,957
Vincent ..	13,065	6,580	33,122	4,177	664	75	59	57,742
Lake ..	12,256	3,992	17,164	7,670	91	84	216	41,473
Maniototo ..	23,253	4,134	71,781	3,220	64	68	505	103,025
Southland ..	218,260	14,776	574,086	67,454	778	705	977	877,636
Wallace and Fjord ..	63,318	6,918	173,772	56,276	179	143	346	300,952
Stewart Island ..	5	..	1	1,673	3	4	3	1,689
Total, North Island ..	312,797	73,939	1,728,356	7,440,591	19,055	7,888	31,006	9,613,632
Total, South Island ..	1,416,707	136,034	3,271,870	1,773,924	13,678	7,271	32,774	6,652,258
Total for Dominion ..	1,729,504	209,973	5,000,226	9,214,515	32,733	15,159	63,780	16,265,890

Wheat.

The wheat harvest of 1911 showed an average yield of 25·73 bushels per acre, the crop realised being 8,290,221 bushels, against 8,661,100 bushels in 1910.

The estimated area under wheat for threshing increased from 311,000 acres in 1910 to 322,167 acres in 1911, and the increase was general throughout the Dominion.

The area under wheat for grain, the estimated gross produce in bushels, and the average yield per acre for each of the last ten years were :—

Season.	Land under Wheat.		Estimated Gross Produce.	Average Yield per Acre.
	Acres.		Bushels.	Bushels.
1900-1	206,465		6,527,154	31·61
1901-2	163,462		4,046,589	24·76
1902-3	194,355		7,457,915	38·37
1903-4	230,346		7,891,654	34·26
1904-5	258,015		9,123,673	35·36
1905-6	222,965		6,798,934	30·60
1906-7	206,185		5,605,252	27·18
1907-8	193,031		5,567,139	28·84
1908-9	252,391		8,772,790	34·75
1909-10	311,000		8,661,100	28·00
1910-11	322,167		8,290,221	25·73

The following shows the area in wheat, and the estimated produce, in each State and the Commonwealth of Australia for the season 1909-10 :—

State.	Wheat-crop.		
	Acres.	Bushels.	Bushels per Acre
New South Wales	1,990,180	28,532,029	14·34
Victoria	2,097,162	28,870,100	13·72
Queensland	117,160	1,571,589	13·41
South Australia	1,895,738	25,133,851	13·26
Western Australia	448,918	5,602,368	12·48
Tasmania	37,078	793,660	21·41
Total for Commonwealth	6,586,236	90,413,597	13·73

The Wheat-crop of the World.

The official estimate of the wheat-crop of the world for the years 1905-6 to 1909-10 is as follows :—

THE WHEAT-CROP OF THE WORLD

(In Quarters of 480 lb., 000 omitted).

Country.	1909-10.	1908-9.	1907-8.	1906-7.	1905-6.
	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.
Austria	6,800	7,800	6,800	7,200	6,750
Hungary*	14,190	20,800	16,750	25,900	21,500
Belgium	1,750	1,750	1,950	1,750	1,500
Bulgaria	6,900	5,500	4,500	5,150	3,750
Denmark	500	500	500	500	500
France	43,500	38,500	47,500	41,000	42,000
Germany	17,200	17,270	15,935	18,000	17,000
Greece	750	750	750	750	750
Holland	750	600	650	600	590
Italy	19,000	18,250	21,000	20,000	20,000
Portugal	500	400	400	500	500
Roumania	7,000	6,700	5,350	13,600	12,750
Russia†	97,600	71,000	63,675	68,300	79,000
Servia	1,900	1,750	1,400	1,850	1,400
Spain	13,000	13,500	12,750	17,500	11,000
Sweden	700	725	725	750	620
Switzerland	550	500	500	500	500
Turkey (in Europe) ..	5,000	5,000	3,500	5,000	5,000
United Kingdom ..	7,800	6,750	7,250	7,580	7,550
Total for Europe ..	244,490	218,045	211,385	231,430	232,660
Algeria	4,000	3,500	3,890	4,250	2,700
Tunis	1,000	750	1,250	1,250	750
Argentine Republic ..	18,000	20,150	24,300	19,100	17,500
Australasia	11,000	9,500	6,000	10,000	9,500
Asia Minor	5,000	4,000	3,500	5,000	5,000
Canada	21,000	15,750	10,500	15,400	13,500
Cape Colony	500	500	500	500	500
Chili	2,500	2,500	1,800	1,750	1,550
Egypt	1,500	1,250	1,500	1,500	1,500
India	35,370	35,400	27,750	39,700	40,000
Persia	3,500	3,500	4,000	3,500	3,500
Syria	4,000	3,500	3,000	3,000	2,500
United States of America	92,000	83,000	79,000	91,000	85,000
Uruguay	1,250	1,250	1,000	800	575
Mexico	1,000	1,000	1,000	1,000	750
Japan	3,000	2,900	2,800	2,745	2,250
Total out of Europe	204,620	188,450	171,790	200,495	187,075
Grand totals ..	449,110	406,495	383,175	431,925	419,735

* Including Slavonia and Croatia.

† Including Poland and Siberia.

Consumption of Wheat.

The normal yearly consumption of wheat per head of population in New Zealand has been estimated at 6 bushels, and the quantity required for seed at 2 bushels to the acre. On this basis the quantity needed during the year 1911 for human consumption and as seed for the season's crop is estimated to be 7,000,000 bushels.

The difficulty of correctly computing the consumption of bread-stuffs is shown by the great differences in the estimates arrived at.

The average quantity required per head of the population (exclusive of that used for seed) has been calculated at 6·3 bushels for Western Australia, and 5 bushels for Victoria, by statisticians in those States.

The following is the average annual consumption of wheat per inhabitant in some of the principal countries of the world :—

United Kingdom	..	..	..	..	5·6 bushels.
Canada	..	..	..	..	6·6 "
France	..	..	..	..	8·1 "
Germany	..	..	..	..	3·0 "
Russia	..	..	..	..	2·1 "
Italy	..	..	..	..	5·4 "
United States	..	..	..	..	4·5 "

The English consumption during the last thirty years appears to have ranged from $5\frac{1}{2}$ to 6 bushels per head of population.

Oats.

The estimated extent of land in oats sown for grain in 1911 was 302,827 acres, against 377,000 acres harvested in the preceding year. The breadth of land in oats for chaffing, ensilage, or feeding down for 1911 was 290,569 acres.

The yield per acre was, in 1911, 33·41 bushels, and in 1910 37 bushels, and the quantity of grain produced was 10,118,917 bushels and 13,804,000 bushels for each year respectively.

The oat-crop for 1909–10 in the States of the Commonwealth of Australia and for 1910–11 in New Zealand was as follows :—

		Acres.	Bushels.	Average per Acre.
New South Wales	..	81,452	1,966,586	24·14
Victoria	..	384,226	7,913,423	20·60
Queensland	..	2,789	50,018	17·93
South Australia	..	85,346	1,209,131	14·17
Western Australia	..	73,342	1,248,162	17·02
Tasmania	..	71,293	2,347,548	32·93
New Zealand	..	377,000	13,804,000	37·00

Maize.

The last returns for 1910–11 show that there were 13,057 acres sown for grain, the yield being 569,807 bushels of corn, an average of 43·64 bushels per acre, and 5,800 acres sown for ensilage or feeding down with stock. Maize is grown only in the North Island, with the exception of a few acres. The Provincial District of Auckland had 14,568 acres; Hawke's Bay, 943 acres; Taranaki, 1,597 acres; and Wellington, 1,480 acres, in 1911. Small acreages are found in nearly all the counties of the Auckland, Taranaki, and Hawke's Bay Districts.

Barley.

The estimated area under barley (for threshing) for the season 1910–11 was 33,491 acres, the crop being estimated at 927,112

bushels, an average yield per acre of 27·68 bushels. In 1909-10 the area under barley was 41,500 acres, and the yield 1,304,000 bushels, or 31 bushels per acre.

Rye.

There were 4,395 acres in rye, yielding 106,271 bushels, or at the rate of 24·18 bushels per acre, in 1910-11. No figures are available for 1909-10.

Peas and Beans.

The area under peas for threshing in the season 1910-11 was 14,829 acres, yielding 511,600 bushels, or an average of 34·50 bushels per acre. No figures are available for the previous year.

Under beans there were 1,798 acres, giving a return of 72,150 bushels, the average being 40·13 bushels per acre. No returns were collected in 1909-10.

Potatoes.

The area under potatoes was 29,023 acres in 1910-11, yielding a return of 141,510 tons, or a rate of 4·87 tons per acre, against 30,500 acres in 1909-10, and 180,509 tons (or 6 tons per acre).

A comparison of the gross yield of potatoes with the amount exported in each of twelve years showed that for such period an average of 597 lb. per head of population was consumed. Allowing for waste, pig-feed, and seed, the average amount retained for human consumption was found to be 449 lb. a head.

Turnips, &c.

Turnips and rape form a most important crop in a sheep-breeding country such as New Zealand, and in 1892 the area of land under this crop amounted to 422,359 acres. The returns for 1898 gave only 470,582 acres, but for the 1910-11 season 659,016 acres (450,959 acres in turnips and 208,057 acres in rape) were set down as under these crops.

Hops.

There were 653 acres under hops in 1910-11, as against 688 acres at the last collection. No account of the produce has been taken for some years, but in 1895 the yield was 7,556 cwt.

Of the land under hops in 1910-11, 605 acres were in the Waimea County and 14 in Takaka, both in the Provincial District of Nelson. The import of hops in 1910 amounted to 351 cwt., and the exports, the produce of the Dominion, to 3,851 cwt.

Tobacco.

The growing of tobacco does not progress in New Zealand. In 1889, 34 acres were being cultivated; in 1890, 25 acres; in 1891, 16 acres; in 1892, 6 acres; in 1893, 4 acres; in 1894, 4 acres; and in 1895, 5 acres, producing 1,599 lb. of dried leaf. Statistics of this crop have not been taken since 1895.

Gardens and Orchards.

The extent of land in garden was 15,159 acres, of which 10,400 acres were private gardens and 4,759 acres market gardens. In plantations of forest trees there were 63,780 acres.

There were 31,953 acres in orchard in 1910-11, an increase of 3,399 acres on the area so returned in the previous year, and 780 acres were returned as "vineyard," as against 663 acres in 1909. No account of the produce of orchards has yet been taken. The fruit-crop is supplemented by a considerable import from the Australian States and Fiji.

Sown Grasses and Seeds.

New Zealand is essentially suited for grazing purposes. Wherever there is light and moisture English grasses thrive when the natural bush and fern are cleared off—in fact, the white clover gradually overcomes the fern; and, from the mildness of the winter season, there are few places where there is not some growth, even in the coldest months of the year. In all parts of the Dominion stock live, although in varying condition, without other food than such as they can pick up. Sown-grass land, as might be expected, heads the list of cultivations.

At the beginning of the year 1911 there were 14,214,741 acres under artificial grasses. Of these, 5,000,226 acres had been previously ploughed, while 9,214,515 acres had not been ploughed. Much of the latter area was bush or forest land, sown down in grass after the timber had been wholly or partially burnt off.

The area under ryegrass for seed in the season of 1910-11 was 46,706 acres, yielding 1,167,650 bushels of 20 lb., or a rate of 25 bushels per acre. The figures for 1909-10 were only estimates.

In cocksfoot there were 41,918 acres, which yielded 5,868,520 lb., or an average of 140 lb. per acre. The figures for 1909-10 were only estimates.

Seeds for sowing pasture lands are used much as in Great Britain, the following being a common mixture: Perennial ryegrass, 25 lb. to 30 lb. per acre; cocksfoot, 2 lb.; alsike, 2 lb.; timothy, 3 lb.; cowgrass, 2 lb.; red clover, 2 lb.; white clover, 2 lb.; rape, 1 lb.; total, 39 lb. to 44 lb. per acre. Pastures are renewed at intervals of from four to eight years, according to the nature of the land.

The following shows the acreage in sown grasses in Australia 1909-10, and in New Zealand for the 1910-11 season:—

					Acres.
New South Wales	..	..	..	..	888,937
Victoria	..	..	..	..	988,671
Queensland	..	..	..	..	108,438
South Australia	..	..	..	..	23,343
Western Australia	..	..	..	..	9,017
Tasmania	..	..	..	..	439,450
New Zealand	..	..	..	..	14,214,741

It will be observed that the acreage of land under sown grasses is far greater in New Zealand than in the whole of Australia and Tasmania. When compared in size with the States of Australia, New Zealand is not large—about one-thirtieth of their total area—but in respect of grazing capabilities the relative importance of this country is much greater. Australia is generally unsuitable, owing to conditions of climate, for the growth of English grasses, and the amount of feed produced by the natural grasses throughout the year is very much less per acre than is obtained from the sown-grass lands in New Zealand; indeed, it may be said that the average productiveness of grass-land is about nine times as great here as in Australia, or, in other words, that land in New Zealand covered with English grasses may be considered equal for grazing purposes to an area of Australian land about nine times as great.

In addition to the artificially sown pastures, the returns for 1910-11 show that 23,972,236 acres of unimproved land, including that in tussock or native grass, belonged to the occupied holdings, and were available for stock-feeding by the sheep-farmers and cattle-farmers.

SECTION XVIII.—POPULATION.

THE population of New Zealand, as estimated on the 31st December, 1910, and the increase during the year, is shown below :—

	Males.	Females.	Totals.
Estimated population (exclusive of Maoris, also Cook and other Pacific islands) on 31st December, 1909	520,406	462,520	982,926
Increase during the year 1910—			
By excess of births over deaths..	7,838	8,507	16,345
By excess of immigration over emigration	1,684	1,724	3,408
Estimated population (exclusive of Maoris, also Cook and other Pacific islands) on 31st December, 1910 ..	529,928	472,751	1,002,679
Maori population, census, April, 1906	25,538	22,193	47,731
Population of Cook and other Pacific islands, census, 1906 ..	6,224	6,116	*12,340
Total estimated population of Dominion on 31st December, 1910.. ..	561,690	501,060	1,062,750

* Excluding 776 Natives of South Sea islands at labour abroad.

Estimates of population are made from the records of births and deaths and the returns of migration. These estimates, when tested in the past by census results, have been found to approach very closely to the facts, and there is no reason to suspect that the present estimate is an exception. The following table shows the growth of the population during the last twenty-five years :—

Year.	Estimated Population on the 31st December.*	Increase during the Year			Centesimal Increase on Population of Previous Year.
		By Excess of Births over Deaths.	By Excess of Arrivals over Departures.	Net Increase.	
1886	589,386	13,164	- 17,194†	58,886	10·24
1887	603,361	12,998			
1888	607,380	13,194			
1889	616,052	12,685			
1890	625,508	12,284			
1891	634,058	11,755	4,958 10,412 2,253 895 1,472 2,752 2,696 1,887 1,831 6,522 7,992 11,275 10,355 9,302 12,848 5,730 14,261 4,719 3,408	16,375 21,832 13,863 12,578 13,652 14,894 14,407 13,042 14,177 19,379 20,272 24,576 25,034 24,923 28,761 20,758 31,158 22,284 19,753	2·58 3·36 2·06 1·83 1·95 2·09 1·98 1·75 1·87 2·52 2·57 3·04 3·01 2·91 3·26 2·28 3·35 2·32 2·01
1892	650,433	11,417			
1893	672,265	11,420			
1894	686,128	11,610			
1895	698,706	11,683			
1896	714,162	12,180			
1897	729,056	12,142			
1898	743,463	11,711			
1899	756,505	11,155			
1900	768,278	12,346			
1901	787,657	12,857			
1902	807,929	12,280			
1903	832,505	13,301			
1904	857,539	14,679			
1905	882,462	15,621			
1906	908,726	15,913			
1907	929,484	15,028			
1908	960,642	16,897			
1909	982,926	17,565			
1910	1,002,679	16,345			

* Corrected where necessary in accordance with census results. † Loss. The amount of loss by departures in the period 1886-91, though correct in the aggregate, cannot be allocated with exactness to the respective years.

An examination of the increase for each quarter of the past ten years discloses a considerable amount of irregularity, due to fluctuations in migration. The second quarter shows a loss from this cause for each year, excepting 1893, for the reason that visitors to New Zealand take their departure just before the winter season. New-Zealanders travelling abroad for pleasure usually sail during the autumn, returning in the spring and summer.

INCREASE OF POPULATION DURING EACH QUARTER, 1901-10.

Year.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total Increase.
1901	4,441	2,606	4,797	7,535	19,379
1902	2,339	1,535	6,581	9,817	20,272
1903	6,921	3,994	4,655	9,006	24,576
1904	6,452	3,274	5,610	9,698	25,034
1905	7,434	2,395	5,518	9,576	24,923
1906	7,509	3,809	5,797	11,646	28,761
1907	5,141	720	4,595	10,302	20,758
1908	8,105	3,232	6,965	12,856	31,158
1909	7,690	1,034	4,025	9,535	22,284
1910	4,555	792	4,084	10,322	19,753

INCREASE OF POPULATION—*continued*.

Year.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total Increase.
<i>Increase by Migration.</i>					
1901	1,164	— 711	1,902	4,167	6,522
1902	— 825	— 1,615	3,758	6,674	7,992
1903	3,814	796	1,466	5,199	11,275
1904	2,861	— 307	2,043	5,758	10,355
1905	3,448	— 1,384	1,705	5,533	9,302
1906	3,426	— 190	1,897	7,715	12,848
1907	1,513	— 3,106	1,092	6,231	5,730
1908	3,548	— 715	3,117	8,311	14,261
1909	3,435	— 3,517	— 167	4,968	4,719
1910	577	— 3,430	184	6,077	3,408

The minus sign (—) denotes decrease.

Although the birth-rate in New Zealand is low as compared with that of some countries of Europe, the general death-rate and also the mortality among infants is the lowest recorded by any other country of the world. The natural increase of population is shown in the following table.

NATURAL INCREASE OF POPULATION, 1901-10.

Year	Excess of Births over Deaths.			Natural Increase per 1,000 of Mean Population.
	Males.	Females.	Persons.	
1901	6,053	6,804	12,857	16·58
1902	5,763	6,517	12,280	15·39
1903	6,270	7,031	13,301	16·21
1904	7,009	7,670	14,679	17·37
1905	7,420	8,201	15,621	17·95
1906	7,462	8,451	15,913	17·77
1907	7,080	7,948	15,028	16·35
1908	8,045	8,852	16,897	17·88
1909	8,256	9,309	17,565	18·07
1910	7,838	8,507	16,345	16·46

The average rate of natural increase for the above period was 17·00 per 1,000. The average rate in New Zealand, the Commonwealth of Australia, and some of the principal countries of Europe is given hereunder:—

Country.	Increase.
New Zealand (1906-10)	17·31
Commonwealth of Australia (1905-9)	15·62
German Empire (1903-7)	14·13
Denmark (1904-8)	14·22
England and Wales (1904-8)	11·71
Scotland	11·55
Italy	10·99
Switzerland (1903-7)	9·99
Ireland (1904-8)	5·96
France	0·75

MIGRATION.

The number of persons arriving in and departing from New Zealand is compiled from the records of the Customs Department, and the departures from the Dominion by the Union Steamship Company's boats are checked by special returns kindly furnished by the pursers of the steamers, so that where persons who did not book their passages have been omitted, the necessary additions can be made. The pursers' returns also serve to prevent the occasional omission of the full number of persons leaving by any one vessel, which sometimes has happened previous to the introduction of this check. Unless more passengers are at any time of great pressure taken away from New Zealand than can lawfully be carried, the returns of outgo of population should prove nearly correct.

The total number of arrivals and departures during the past ten years, distinguishing the sexes and the number of those under or over twelve years of age, is given in the next table.

ARRIVALS AND DEPARTURES, 1901-10.

Year.	Arrivals.				Total.
	Over 12 Years of Age.		Under 12 Years of Age.		
	Males.	Females.	Males.	Females.	
1901	15,724	6,942	1,244	1,176	25,086
1902	20,029	7,406	1,493	1,365	30,293
1903	18,628	8,603	1,851	1,801	30,883
1904	20,118	9,008	1,862	1,644	32,632
1905	19,541	9,606	1,803	1,735	32,685
1906	23,374	11,651	2,233	1,975	39,233
1907	21,266	11,080	1,962	1,800	36,108
1908	26,664	13,269	2,678	2,359	44,970
1909	21,763	12,480	2,302	2,105	38,650
1910	20,161	11,832	1,974	1,802	35,769

Year.	Departures.					Total.
	Over 12 Years of Age		Under 12 Years of Age.			
	Males.	Females.	Males.	Females.		
1901	11,646	5,477	780	661	18,564	
1902	14,752	5,969	848	732	22,301	
1903	12,120	5,969	863	656	19,608	
1904	13,782	6,928	889	678	22,277	
1905	14,468	7,164	922	829	23,383	
1906	16,023	8,082	1,188	1,092	26,385	
1907	17,968	9,823	1,342	1,245	30,378	
1908	18,364	9,779	1,343	1,223	30,709	
1909	20,772	10,373	1,472	1,314	33,931	
1910	19,032	10,629	1,419	1,281	32,361	

PASSAGES AT REDUCED RATES FROM THE UNITED KINGDOM TO NEW ZEALAND.

Residents in the Dominion may nominate domestic servants, and *near relatives* may also nominate agriculturists for passages at reduced rates, and pay the necessary sum to the Under-Secretary for Immigration, Wellington.

The payments required are as follow:—

Second class	...	...	£27.
Third class (two-berth cabin)	...	...	£12.
" (four-berth cabin)	...	...	£10.

Children between three years and twelve years of age travelling with their parents are charged half-price. One child under three years of age in each family is taken free. A quarter-fare is charged for each additional child under three years of age.

The full rates are—second class, £38; and third class, £21 or £19: a reduction to the passenger of £11 in the second-class or £9 in the third class.

Passages are granted on vessels belonging to the Shaw, Savill, and Albion Company, the New Zealand Shipping Company, and the Federal Steam Navigation Company to persons approved by the High Commissioner in London.

The persons nominated must be within the age-limit (50). A nomination is accepted only upon the understanding that the relative in the Dominion is responsible for the nominee immediately on arrival.

Persons in a delicate state of health should not be nominated, as passages at reduced rates will not be granted to them. When cases of lung, chest, or other complaints are discovered in any member of a family by the Medical Officer at London or Liverpool, the whole family will be prevented from sailing.

The question of suitability of any applicant for reduced passage will be decided by the High Commissioner.

The High Commissioner in London is authorized to grant passages at reduced rates to *bona fide* farmers and farm labourers, provided the applicant is possessed of a capital of not less than £25 for married farmers and farm labourers, and £10 for unmarried farm labourers. A farm labourer can obtain a passage in a six-berth enclosed cabin at £8. The rates in the four-berth and two-berth cabins are the same as given above. The rates for single female domestic servants are as follows: In a six-berth enclosed cabin, £2 16s.; in a four-berth cabin, £4 16s.; in a two-berth cabin, £6 16s.

Agriculturists, whether nominated or not, are only given passages so that they may arrive in the Dominion during the summer months.

The address of the High Commissioner for New Zealand is Westminster Chambers, 13 Victoria Street, London S.W.

The total number of persons assisted during each of the last six years was,—

Year.	Persons assisted.	Year.	Persons assisted.
1905	2,191	1908	4,466
1906	3,880	1909	3,990
1907	2,510	1910	2,179

ARRIVALS FROM AND DEPARTURES TO DIFFERENT COUNTRIES.

The external movement of population is greatest with the Commonwealth of Australia, as will be seen in the next table, but these numbers are inflated by the inclusion of many persons who sail from New Zealand for Australia to make that country a starting-point for further travel, and who may or may not return by the same route. The real destination and original place of departure when returning is not ascertained in these cases.

Countries.	1906.	1907.	1908.	1909.	1910.
<i>Arrivals.</i>					
United Kingdom	8,293	7,449	11,348	11,184	9,367
Commonwealth of Australia ..	28,699	26,916	31,769	25,548	24,502
Other British possessions ..	1,320	1,216	1,138	1,141	932
Foreign countries	921	527	715	777	968
	39,233	36,108	44,970	38,650	35,769
<i>Departures.</i>					
United Kingdom	2,495	2,446	2,635	2,676	2,509
Commonwealth of Australia ..	21,722	25,848	26,468	28,995	27,100
Other British possessions ..	845	1,244	1,193	1,326	1,396
Foreign countries	1,323	840	413	934	1,356
	26,385	30,378	30,709	33,931	32,361

RACE ALIENS.

Persons of other than European descent are classified in the immigration returns as "race aliens." It will be seen by the following table that the number of arrivals of this class during 1908 was greater than usual, the object being to escape the education test which came into operation during the latter end of that year.

Birthplace.	Year.									
	1901	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
China	75	69	132	235	239	260	255	538	171	209
Syria	27	4	12	3	6	30	3	32	23	12
Asia Minor	10	6	8	6	5	..	4	6	12	4
Japan	1	4	8	10	1	10	3	3	7	1
Palestine	..	..	..	7	..	..	..	..	..	..
Armenia	..	..	..	13	..	..	..	..	..	..
Pacific Islands ..	17	12	..	14	24	28	27	10	18	7
Other counties ..	..	1	4	4	1	1	1	..	2	2
Totals	130	96	164	292	276	329	293	589	233	235

The majority of the 235 race aliens who arrived during 1910 were persons formerly resident in New Zealand, and who were returning to their homes, 208 Chinese being included in this category.

IMMIGRATION RESTRICTION.

The Immigration Restriction Act prohibits the landing of lunatics or idiots, persons suffering from a dangerous or loathsome contagious disease, certain convicted criminals, and any person other than of British birth who fails to write out and sign, in any European language, a prescribed form of application. Shipwrecked persons are excepted. The Act does not apply to officers and crews of any mercantile vessels, provided they are not discharged in New Zealand, and are on board the vessel when she clears outward. There are other exemptions under the Act, including His Majesty's land and sea forces, and the officers and crew of any ship of war of any Government, and certain persons may be specially exempted by the Minister of Internal Affairs. Heavy penalties may be incurred for breaches of this law. Regulations under the Act were published in the *New Zealand Gazette* of 26th November, 1908.

The law of the Commonwealth of Australia, with a view to the restriction of Asiatic immigration, prohibits the landing of any person who, when asked to do so by a public officer, fails to write out from dictation and sign a passage of fifty words in any prescribed language. An Act, having a similar purpose, was passed by the Parliament of New Zealand in 1907, requiring that any Chinese proposing to land in the Dominion shall be able to read a printed passage of not less than one hundred words of the English language. This measure became law on the 23rd October, 1908, and is now incorporated in the Immigration Restriction Act, 1908.

CENSUS, 1911.

European Population.

The population of the Dominion (exclusive of Maoris and the population of the annexed Pacific islands) according to the census of 2nd April, 1911, was 1,008,468 persons, as shown by the following summaries :—

(a.) SUMMARY BY ISLANDS.

	Total Population (exclusive of Maoris and that of Annexed Pacific Islands).		Half-castes living as Europeans (included previously).		Chinese (included previously).	
	Persons.	Males.	Females.	Males.	Females.	Males.
North Island* ..	563,729	300,199	263,530	1,254	1,194	1,322
South Island* ..	444,120	231,323	212,797	217	207	1,120
Stewart Island ..	357	220	137	4	1	..
Chatham Islands ..	258	166	92	..	2	..
Kermadec Islands ..	4	2	2	..	..	..
Totals for Dominion ..	1,008,468	531,910	476,558	1,475	1,404	2,542
						88

(b.) SUMMARY BY COUNTIES AND BOROUGHES.

	Total Population (exclusive of Maoris and that of Annexed Pacific Islands).		Half-castes living as Europeans (included previously).		Chinese (included previously).	
	Persons.	Males.	Females.	Males.	Females.	Males.
Counties† ..	496,779	276,495	220,284	1,152	1,120	1,096
Boroughs ..	505,598	250,196	255,402	313	282	1,382
Islands adjacent to New Zealand†	1,079	652	427	7	2	..
Kermadec Islands ..	4	2	2	..	..	..
On shipboard ..	4,865	4,456	409	3	..	64
Main Trunk Railway ..	143	109	34	..	..	..
Totals ..	1,008,468	531,910	476,558	1,475	1,404	2,542
						88

* Including persons on shipboard, but excluding 133 persons, officers and crew of British man-of-war, in Auckland Harbour on 2nd April, 1911.

† Including Stewart Island and Chatham Islands.

‡ These islands are not within the boundaries of the neighbouring counties, but their inhabitants are included in the population of the North and South Islands given in previous table.

PROPORTIONS OF THE SEXES AND DENSITY OF POPULATION.

The gradual equalization of the numbers of the sexes, the density of population, and the average number of persons to an inhabited dwelling are illustrated in the following table :—

Date of Enumeration.	Number of Females to 100 Males.	Number of Persons to a Square Mile.	Number of Persons to an Inhabited Dwelling.	Number of Inhabited Dwellings to a Square Mile.
December, 1861	62·16	0·944	4·42	0·214
February, 1871	70·52	2·456	4·48	0·548
April, 1881 ..	81·72	4·693	5·12	0·917
April, 1891 ..	88·26	6·024	5·06	1·191
March, 1901 ..	90·33	7·427	4·86	1·527
April, 1906 ..	88·65	8·541	4·82	1·773
April, 1911 ..	89·59	9·690	4·68	2·070

INCREASE OF POPULATION AT SUCCESSIVE CENSUSES.

The increase of population of European descent at successive census periods has been,—

Date of Enumeration.	Population. Persons.	Numerical Increase. Persons.	Centesimal Increase.
December, 1858 ..	59,413		
" 1861 ..	99,021	39,608	66·67
" 1864 ..	172,158	73,137	73·86
" 1867 ..	218,668	46,510	27·01
" 1871 ..	256,393	37,725	17·25
February, 1871 ..	256,393	43,121	16·82
March, 1874 ..	299,514	114,898	38·36
" 1878 ..	414,412	75,521	18·22
April, 1881 ..	489,933	88,549	18·07
March, 1886 ..	578,482	48,176	8·33
April, 1891 ..	626,658	76,702	12·24
" 1896 ..	703,360	69,359	9·86
March, 1901 ..	772,719	115,859	14·99
April, 1906 ..	888,578		
" 1911 ..	1,008,468	119,890	13·49

POPULATION OF PRINCIPAL DIVISIONS.

The principal natural divisions in New Zealand are the North, South, and Stewart Islands. These contain nearly the whole population of European descent, the Cook and other annexed islands being inhabited almost solely by coloured Natives. Until 1876 the Dominion was divided into provincial districts, originally seven and

GRAPHS SHOWING THE POPULATION OF NEW ZEALAND, 1854-1910.



EXPLANATION OF THE GRAPH.—The base of each square represents an interval of one year, and the vertical height 10,000 persons. The upper curve shows the increase in the Total Population, the middle the increase in Males, and the lower in Females.

finally nine in number. On the abolition of these provinces a system of local administration was established by a subdivision of the whole area of the Dominion into counties and boroughs. Subsequently minor subdivisions, interior to counties, were legalized, these subdistricts having more limited powers for administration.

The population of the two main Islands, with that of Stewart Island and the Chatham Islands, the former being included in the South and the latter in the North Island, at each census period, is given in the next table, together with the proportion per cent. that the population of each division bears to the total population of the Dominion.

POPULATION OF THE NORTH AND SOUTH ISLANDS, 1858-1906.

Census Year.	Population (excluding Maoris).			Proportions per Cent.	
	North Island and Chatham Islands.	South and Stewart Islands.	Total.	North Island and Chatham Islands.	South and Stewart Islands.
1858	34,179	25,234	59,413	57·53	42·47
1861	41,691	57,330	99,021	42·10	57·90
1864	65,349	106,809	172,158	37·96	62·04
1867	80,097	138,571	218,668	36·63	63·37
1871	97,008	159,385	256,393	37·84	62·16
1874	112,063	187,451	299,514	37·41	62·59
1878	158,404	256,008	414,412	38·22	61·78
1881	193,289	296,644	489,933	39·45	60·55
1886	250,681	327,801	578,482	43·33	56·67
1891	281,745	344,913	626,658	44·96	55·04
1896	340,872	362,488	703,360	48·46	51·54
1901	390,786	381,933	772,719	50·57	49·43
1906	476,934	411,645	888,578	53·67	46·33
1911	563,991	444,477	1,008,468	55·93	44·07

It will be seen that in the earlier year the North Island had the larger population, this position being reversed at the succeeding enumerations until 1901. The Maori war which broke out in 1860 retarded settlement in the North, while the large area of land reserved for the Maoris was until quite recently a serious hindrance to the development of this portion of the Dominion. The construction of railways, roads, and bridges is now giving access to larger

areas of new lands, which are being offered for selection in blocks intended for close settlement, and quickly occupied. The South Island was practically free from the Maori trouble, and settlement was more rapid, though much of the land was disposed of in large areas. The discovery of gold in Otago in 1861 and in the West Coast in 1864 attracted to these localities considerable numbers of miners.

In 1870 a policy of vigorous construction of railways and other developmental public works and of assistance to immigrants was inaugurated, resulting in a large increase to the population, including nearly ninety thousand Government immigrants introduced between 1873 and 1879.

POPULATION IN PROVINCIAL DISTRICTS.

Although for political or administrative purposes provinces have now no signification, still the territorial subdivisions have been retained for many reasons. An estimate of the population is made each year, but it is based on the assumption that there has been no movement since the previous census and that new arrivals are distributed in proportion to the total population of each district. The population as ascertained at the census of 1911 was,—

Provincial District.	Population, Census, 1911.		
	Males.	Females.	Totals.
Auckland	141,700	122,820	264,520
Taranaki	27,785	23,784	51,569
Hawke's Bay	25,769	22,777	48,546
Wellington	104,945	94,149	199,094
Marlborough	8,745	7,240	15,985
Nelson	26,958	21,505	48,463
Westland	8,719	6,995	15,714
Canterbury	88,391	84,794	173,185
Otago—			
Otago portion	66,995	65,407	132,402
Southland portion	31,735	26,993	58,728
Chatham Islands	166	92	258
Kermadec Islands	2	2	4
Totals for the Dominion ..	531,910	476,558	1,008,468

POPULATION IN COUNTIES.

The counties contain what is understood to be the rural population, but this is not strictly correct, as some of the towns not municipalized, and forming part of counties, have considerable populations. On the other hand the population of a few of the smaller boroughs might be classed as rural, as will be noticed further on. The population of counties is ascertained only when a census is taken, no estimate being attempted. Each county, with the number of its inhabitants, is shown below.

County.	Population, Census, 1911.	County.	Population, Census, 1911.
Mangonui ..	3,105	Manawatu ..	4,461
Whangaroa ..	775	Kairanga ..	3,877
Hokianga ..	3,041	Horowhenua ..	6,064
Bay of Islands ..	3,147	Masterton ..	4,020
Whangarei ..	7,854	Mauriceville ..	950
Hobson ..	4,078	Castlepoint ..	620
Otamatea ..	3,548	Wairarapa South ..	2,745
Rodney ..	4,249	Featherston ..	3,965
Waitemata ..	8,648	Hutt ..	5,189
Eden ..	23,258	Makara ..	3,632
Manukau ..	16,180	Sounds ..	1,181
Coromandel ..	2,732	Marlborough ..	8,056
Thames ..	4,388	Collingwood ..	1,206
Waikato ..	6,610	Takaka ..	1,820
Raglan ..	2,907	Waimea ..	8,626
Waipa ..	6,971	Buller ..	6,682
Kawhia ..	875	Inangahua ..	4,503
Waitomo ..	3,595	Murchison ..	1,014
Awakino ..	605	Amuri ..	1,695
Ohinemuri ..	6,044	Cheviot ..	1,383
Piako ..	3,200	Kaikoura ..	1,926
Matamata ..	2,946	Grey ..	7,202
Tauranga ..	2,932	Westland ..	4,274
Rotorua ..	3,544	Waipara ..	1,966
East Taupo ..	528	Tawera ..	1,241
West Taupo ..	974	Ashley ..	9,417
Ohura ..	1,436	Selwyn ..	1,267
Kaitieke ..	1,966	Waimairi ..	13,582
Whakatane ..	1,700	Malvern ..	3,458
Opotiki ..	2,419	Paparua ..	4,092
Waipū ..	1,734	Heathcote ..	4,154
Cook ..	6,420	Halswell ..	1,898
Waikohu ..	2,963	Springs ..	1,891
Clifton ..	2,198	Edlesmere ..	3,773
Taranaki ..	9,245	Mount Herbert ..	464
Egmont ..	3,264	Akaroa ..	2,251
Stratford ..	5,226	Wairewa ..	894
Whangamomona ..	1,615	Ashburton ..	12,313
Eltham ..	3,339	Geraldine ..	5,471
Waimate West ..	2,358	Levels ..	5,319
Hawera ..	3,659	Mackenzie ..	2,341
Patea ..	3,565	Waimate ..	6,730
Waioa ..	1,876	Waitaki ..	9,733
Hawke's Bay ..	10,114	Waihemo ..	1,647
Waipawa ..	3,041	Vincent ..	3,734
Waipukurau ..	1,581	Maniototo ..	2,812
Patangata ..	1,936	Lake ..	1,958
Dannevirke ..	4,683	Tuapeka ..	5,732
Weber ..	526	Waikouaiti ..	4,318
Woodville ..	1,880	Taieri ..	6,202
Pahiātua ..	3,398	Peninsula ..	2,937
Akitio ..	1,421	Bruce ..	4,835
Eketahuna ..	1,914	Clutha ..	7,266
Waimarino ..	4,151	Southland ..	26,460
Waitotara ..	4,390	Wallace ..	9,422
Wanganui ..	3,549	Fiord ..	42
Rangitikei ..	9,042	Stewart Island ..	325
Kiwieta ..	2,781	Chatham Islands ..	258
Pohangina ..	1,797		
Oroua ..	3,588		
		Total ..	496,779

POPULATION IN BOROUGHES.

Prior to the year 1900 there was no statutory limitation to the number of inhabitants necessary to constitute a borough, consequently many small centres, the residents being mainly engaged in rural occupations, became municipalities. The Municipal Corporations Act now imposes a limit as to area, and provides that no new borough may be constituted unless the proposed area contains not less than 1,000 inhabitants. The total number of persons resident in boroughs at the last five census periods was as follows:—

Census Period.	Population in Boroughs. Persons.
1891	270,343
1896	307,294
1901	350,202
1906	424,614
1911	505,598

The increase during the twenty years was 235,255 persons, or 87·02 per cent. Boroughs which in 1911 had a population of 1,000 or over contained an aggregate of 491,836 persons in that year, as against an aggregate of 252,722 persons for boroughs of 1,000 and over for 1891, an increase of 239,114 persons, or 94·62 per cent. The name of each borough, with the number of inhabitants, is given in the next table.

POPULATION OF CITIES AND BOROUGHS ON THE 2ND APRIL, 1911.

City or Borough.	Population. Persons.	City or Borough.	Population. Persons.
Whangarei	2,664	Napier	10,537
Dargaville	1,291	Hastings	6,286
Birkenhead	1,703	Waipawa	1,083
Northcote	1,422	Dannevirke	3,368
Devonport	7,041	Woodville	1,165
Auckland	40,536	Pahiatua	1,358
Grey Lynn	7,454	Eketahuna	806
Newmarket	2,780	Wanganui	10,929
Mount Eden	9,381	Wanganui East	1,737
Mount Albert	6,700	Taihape	1,577
Parnell	5,465	Marton	1,438
Onehunga	4,651	Feilding	3,161
Thames	3,591	Foxton	1,637
Te Aroha	1,298	Palmerston North	10,991
Waihi	6,436	Levin	1,608
Cambridge	1,463	Masterton	5,182
Hamilton	3,542	Carterton	1,546
Te Kuiti	1,266	Greytown	1,042
Tauranga	1,346	Lower Hutt	4,240
Taumarunui	1,128	Petone	6,640
Gisborne	8,196	Onslow	1,789
New Plymouth	5,238	Karori	1,449
Stratford	2,639	Wellington	64,372
Waitara	1,452	Miramar	1,630
Inglewood	1,273	Eastbourne	560
Eltham	1,737	Picton	1,361
Hawera	2,685	Blenheim	3,771
Patea	919	Nelson	8,051
Wairoa	1,097	Richmond	703

POPULATION OF CITIES AND BOROUGHES, ETC.—*continued.*

City or Borough.	Population. Persons.	City or Borough.	Population. Persons.
Motueka	1,229	Dunedin	41,529
Wesport	4,729	Maori Hill	2,216
Greymouth	5,469	Roslyn	5,744
Brunner	1,007	Mornington	4,679
Hokitika	2,291	St. Kilda	4,137
Kumara	783	Green Island	1,872
Ross	643	Mosgiel	1,596
Rangiora	1,834	Milton	1,347
Kaipoi	1,823	Kaitangata	1,567
Christchurch	53,116	Balclutha	1,261
Woolston	3,412	Lawrence	911
Sumner	1,751	Roxburgh	441
New Brighton	1,696	Tapanui	332
Lyttelton	4,058	Gore	3,258
Spreydon	3,286	Mataura	1,199
Akaroa	622	Winton	564
Ashburton	2,671	Invercargill	12,782
Geraldine	945	Invercargill South	1,388
Temuka	1,741	Campbelltown	1,780
Timaru	11,280	Riverton	936
Waimate	1,762	Naseby	310
Oamaru	5,152	Cromwell	587
Hampden	346	Alexandra	772
Palmerston	792	Queenstown	696
Waikouaiti	688	Arrowtown	406
Port Chalmers	2,100		
West Harbour	1,651	Total	505,598

CHIEF CITIES AND SUBURBS.

The principal cities of New Zealand are Auckland and Wellington in the North Island, Christchurch and Dunedin in the South Island. The population of each of these centres and their suburbs, as taken at the census on 2nd April, 1911, is given below:—

AUCKLAND AND SUBURBS.

	Population.
Auckland City	40,536
Suburban boroughs—	
Birkenhead	1,703
Devonport	7,041
Newmarket	2,780
Grey Lynn	7,454
Parnell	5,465
Mount Eden	9,381
Mount Albert	6,700
Northcote	1,422
Other suburbs	20,194
Total Greater Auckland	102,676

WELLINGTON AND SUBURBS.

Wellington City	64,372
Suburban boroughs—	
Onslow	1,789
Karori	1,449
Miramar	1,630
Eastbourne	560
Other suburbs	929
Total Greater Wellington	70,729

CHRISTCHURCH AND SUBURBS.

	Population.
Christchurch City	53,116
Suburban boroughs—	
Woolston	3,412
New Brighton	1,696
Sumner	1,751
Spreydon	3,286
Other suburbs	16,932
Total Greater Christchurch	80,193

DUNEDIN AND SUBURBS.

Dunedin City	41,529
Suburban boroughs—	
Maori Hill	2,216
Mornington	4,679
Roslyn	5,744
St. Kilda	4,137
West Harbour	1,651
Green Island	1,872
Other suburbs	2,409
Total Greater Dunedin	64,237

The towns of over 8,000 inhabitants, with their suburbs, as at 2nd April, 1911, are:—

	Totals.	Males.	Females.
<i>North Island.</i>			
GISBORNE	8,196	4,305	3,891
NAPIER	10,537	5,175	5,363
Suburbs—			
West Shore	527	286	241
Napier South	420	194	206
Awatoto	272	144	128
Total, Napier and Suburbs	11,736	5,799	5,937
WANGANUI	10,929	5,453	5,476
Suburbs—			
Wanganui East	1,737	887	850
Gonville	1,557	770	787
Mosstown	202	106	96
Putiki	172	93	79
Marybank	105	48	57
Total, Wanganui and Suburbs	14,702	7,357	7,345
PALMERSTON NORTH	10,991	5,470	5,521
<i>South Island.</i>			
NELSON	8,051	3,738	4,313
Suburbs—			
Bishopdale	39	16	23
Tahunanui	144	70	74
Total, Nelson and Suburbs	8,234	3,824	4,410
TIMARU	11,280	5,521	5,759
INVERCARGILL	12,782	6,361	6,421
Suburbs—			
Invercargill South	1,388	720	668
Otatara	211	105	106
Grassmere, Waikiwi, and Prestonville	901	458	443
Waverley	40	24	16
Lindisfarne, Richmond Grove, Inglewood, Adamsons, and Hawthorne	536	283	253
Total, Invercargill and Suburbs	15,858	7,951	7,907

POPULATION IN TOWN DISTRICTS.

The several stages in the growth of a New Zealand town may be marked thus: The village, taxed by the parent county, and dependent upon the latter for all public works; then the legally constituted town district, still subordinate to the county in some matters, its affairs administered by a Board presided over by a Chairman. When its population exceeds 500 the town district may become independent of the county, and control the whole of its revenues. If the population reaches 1,000, full municipal powers may be obtained, with the dignity of a Council presided over by a Mayor, and finally, if the number of inhabitants should reach 20,000 or over, the title of "city" may be assumed, although the constitution remains unaltered. The name of each town district and its population is as follows:—

Town Districts.	Population. Persons.	Town Districts.	Population. Persons.
Kamo	337	Castlecliff	620
Hikurangi	693	Lethbridge	263
Warkworth	689	Hunterville	658
Helensville	670	Mangaweka	494
New Lynn	592	Bull's	519
Hobsonville	373	Halcombe	260
Ellerslie	947	Rongotea	313
Papakura	453	Taradale	894
Pukekohe	629	Ormondville	360
Huntly	1,319	Norsewood	210
Frankton	1,113	Waipukurau	1,043
Kihikihi	259	Otane	260
Leamington	378	Featherston	743
Morrinsville	565	Martinborough	631
Ngaruawahia	478	Upper Hutt	1,050
Te Awamutu	645	Johnsonville	929
Raglan	246	Havelock	301
Rotorua	2,390	Mackenzie	191
Opotiki	936	Amberley	346
Kawhia	157	Southbridge	418
Fitzroy	710	Hampstead	1,490
St. Aubyn	606	Tinwald	539
Opunake	488	Pleasant Point	493
Kaponga	384	Bay	1,042
Normanby	441	Outram	429
Manaia	537	Clinton	451
Gonville	1,557	Wyndham	663
Ohakune	743	Otautau	744
Waverley	626		

POPULATION ON ADJACENT ISLANDS.

Adjacent to the main Islands are many smaller islands, some of which are of considerable area, and are under cultivation; others are but islets used as sites for lighthouses, while others again are barren and unfitted for human habitation. The Chatham Islands have been constituted a county, but so far no movement has been made towards exercising the functions of a local governing body.

The name and population of each of the inhabited islands is shown in the next table:—

Islands.	Total.	Males.	Females.
Mokohinau Lighthouse	7	5	2
Kawau	60	35	25
Motuketekete	3	3	..
Moturekareka	7	3	4
Great Barrier	416	254	162
Little Barrier	2	2	..
Waiheke	227	110	117
Pahiki Lighthouse	4	2	2
Ponui	43	19	24
Rakino	8	5	3
Motutapu	14	6	8
Motuihi	5	4	1
Brown's	4	2	2
Rotoroa	110	104	6
Pakatoa	22	2	20
Bean Rock Lighthouse	1	1	..
Tiritiri Lighthouse	7	4	3
Slipper	2	2	..
Cuvier Lighthouse	14	9	5
Motiti	3	2	1
Somes and Lighthouse	8	4	4
Kapiti	2	2	..
The Brothers Lighthouse.. .. .	3	3	..
D'Urville	77	53	24
Stephen Lighthouse	7	3	4
Ripa	2	2	..
Dog Island Lighthouse	12	4	8
Centre Island Lighthouse	9	7	2
Total	1,079	652	427

Since 1901 the boundaries of New Zealand have been extended to include the Cook and certain other Pacific islands, the population of which is shown elsewhere.

MAORI POPULATION.

A census of the Maori population is taken every five years, the information being obtained by the collectors either directly or through the chief or head of the tribe or hapu. The name, sex, and age, so far as it can be ascertained, of each Maori is entered; but, owing to the nomadic habits of the race and lack of definite knowledge in some particulars, it has been a difficult task in the past. The results of the past five enumerations are as follows:—

Census Year.		Males.	Females.	Total.
1891	.. ..	22,861	19,132	41,993
1896	.. ..	21,673	18,181	39,854
1901	.. ..	23,112	20,031	43,143
1906	.. ..	25,538	22,193	47,731
1911	.. ..	26,475	23,369	49,844

The number of half-castes living as members of Maori tribes, and the number living as and among Europeans, is given in the next table for five census periods. Those under the first heading are already included among Maoris in the preceding table, the others being classed among the European population. It is a matter of some difficulty to ascertain the number of half-castes living as Maoris. There has been no definite rule to guide collectors in deciding when a half-caste should be classified as living as a Maori—indeed, it might be said that all the half-castes and a large proportion of the Maoris in the South Island live in European fashion. They mostly have separate holdings of land and separate homes, and have adopted the habits of the whites.

HALF-CASTES.

Census Year.	Half-castes.		Total.
	Living as Members of Maori Tribes.	Living as and among Europeans.	
1891	2,681	2,184	4,865
1896	3,503	2,259	5,762
1901	3,133	2,406	5,539
1906	3,938	2,578	6,516
1911	4,181	2,879	7,060

The number of Maoris (including half-castes living as Maoris) in each county and adjacent islands, as ascertained at the census of 1911, was as follows:—

NUMBER OF MAORIS IN EACH COUNTY, 1911.

Counties.	Persons.	Counties.	Persons.
Mangonui	2,330	Mauriceville	15
Whangaroa	626	Hutt and Makara	311
Hokianga	3,228	Waitotara	430
Bay of Islands	2,623	Manawatu	248
Hobson	818	Kairanga	171
Otamatea	454	Rangitikei	387
Whangarei	941	Wanganui	656
Rodney	155	Horowhenua	1,295
Great Barrier Island	72	Waimarino	632
Eden (including Waiheke and Chamberlin Islands)	426	Oroua, Pohangina, Kiwitea	221
Waitemata	186	Patea	258
Manukau	776	Hawera	570
Waikato	603	Eltham	38
Raglan	1,720	Whangamomona	51
Kawhia	588	Taranaki	474
Awakino	86	Waimate West	153
East Taupo	1,046	Clifton	388
Matamata	403	Egmont	659
West Taupo	1,299	Sounds	218
Waitomo	1,523	Marlborough	162
Waipa	975	Waimea	133
Piako	231	Collingwood	5
Ohinemuri	661	Takaka	48
Thames	770	Buller	36
Coromandel	498	Westland	82
Ohura	61	Kaikoura	109
Tauranga	1,718	Ashley	230
Whakatane	2,228	Malvern	5
Opotiki	1,427	Selwyn	83
Rotorua	1,461	Heathcote	5
Waiapu	2,952	Akaroa	25
Cook	1,424	Mount Herbert	106
Waikohu	549	Wairewa	107
Hawke's Bay	1,262	Geraldine	174
Waipawa	324	Levels	41
Patangata	134	MacKenzie	4
Woodville	..	Waimate	71
Wairoa	2,660	Waitaki	96
Akitio	56	Waikouaiti	138
Castlepoint	26	Peninsula	140
Featherston	348	Waihemo	7
Wairarapa South	114	Taieri	59
Pahiataua	33	Clutha	39
Masterton	279	Southland	190
Waipukurau	7	Wallace	327
Dannevirke	162	Stewart Island	63
Weber	3	Chatham Islands	219
Eketahuna	9	Ruapuke Island	41

POPULATION OF COOK AND OTHER PACIFIC ISLANDS INCLUDED WITH-
IN THE BOUNDARIES OF THE DOMINION.

During the year 1901, the boundaries of the Dominion were extended to include the Cook Group and certain other of the South Pacific islands. No record of the population of these islands was then obtainable, but at each subsequent census an account of the

number and birthplaces of the inhabitants was taken. The results for the census of 1911 were not complete in time for inclusion here, but according to the census of 1906 the figures are as shown in the following table:—

	Whites and Half-castes living as Whites.	Natives and Half-castes living as Natives.	Total.	Absentees.*
Rarotonga	107 ^(a)	2,334	2,441	..
Mangaia	8 ^(b)	1,523	1,531	..
Atiu	4 ^(c)	914	918	..
Aitutaki	8 ^(d)	1,154	1,162	82
Manke (or Parry Island)	2 ^(e)	444	446	10
Mitiaro	2 ^(f)	208	210	..
Total Cook Group	131	6,577	6,708	92*
Niue (or Savage Island)	21 ^(g)	3,801	3,822	580
Palmerston	..	82	82	..
Penrhyn (or Tongareva)	6 ^(h)	414	420	..
Manihiki	2 ⁽ⁱ⁾	519	521	22
Rakaanga	1 ^(k)	351	352	50
Danger (or Pukapuka) ..	..	435	435	32
Total other islands	30	5,602	5,632	684*
Total population of Pacific islands	161	12,179	12,340	776*

* Absent in ships or at the guano islands, &c.

(a) Birthplaces.—United Kingdom, 28; New Zealand, 23; Australia, 6; Tasmania, 3; Rarotonga, 10; France, 8; Germany, 5; Sweden, 1; Cape Verde Islands, 2; United States America, 8; Holland, 1; Portugal, 2; Society Group, 1; Hong Kong, 6; Jamaica, 2; Manila, 1.

(b) Birthplaces.—United Kingdom, 5; New Zealand, 2; Rarotonga, 1.

(c) Birthplaces.—Australia, 1; Hong Kong, 2; Austria, 1.

(d) Birthplaces.—United Kingdom, 4; New Zealand, 1; Jamaica, 1; Norway, 1; Aitutaki, 1.

(e) Birthplaces.—France, 1; Germany, 1.

(f) Birthplaces.—Cape Verde Islands, 1; Hong Kong, 1.

(g) Birthplaces not stated.

(h) Birthplaces.—United Kingdom, 5; United States America, 1.

(i) Birthplaces.—United Kingdom, 1; Australia, 1.

(k) Birthplaces.—United Kingdom, 1.

SUMMARY OF BIRTHPLACES.—United Kingdom, 44; New Zealand, 26; Australia, 8; Tasmania, 3; Rarotonga, 11; France, 9; Germany, 6; Sweden, 1; Cape Verde Islands, 3; United States America, 9; Holland, 1; Portugal, 2; Society Group, 1; Hong Kong, 9; Jamaica, 3; Manila, 1; Norway, 1; Aitutaki, 1; Austria, 1; not stated, 21 (on Niue Island). Total, 161.

THE CHINESE.

At the census of 1881, the year in which taxation was first imposed on Chinese landing in New Zealand, the Chinese population numbered 5,004 persons, which fell to 4,542 in 1884, and further to 3,711 in 1896. During the period 1881–96 the poll-tax was £10 per head, and this seemed sufficient for the purpose of preventing a large influx of the Chinese. During the years 1894 and 1895, however, the arrivals shown by the Customs returns were found to be somewhat greater than the departures, and in 1896 an Act was

passed, raising the poll-tax on Chinese immigrants to £100 per head and limiting the number of Chinese passengers that may be carried by vessels to New Zealand to one for every 200 tons burthen. According to the census of 1901 the Chinese population was 2,857, and in 1906 it was 2,570, while the census of 1911 makes the total 2,630, of whom 88 were females. The arrivals during 1910 numbered 209, of whom 207 had previously resided in New Zealand, and the departures numbered 298.

NATURALIZATION

When any alien residing in New Zealand desires to be naturalized, he may present to the Governor a memorial signed and verified by a statutory declaration setting forth—

His name, age, birthplace, residence, and occupation;

The length of his residence in New Zealand, and his desire to settle therein;

A request that letters of naturalization may be granted to him.

Every memorial must have written upon it or attached a certificate signed by some Magistrate or Justice to the effect that the applicant is known to the person certifying and is of good repute. On taking the oath of allegiance he shall enjoy within New Zealand all the rights and capacities that a natural-born subject of the United Kingdom can enjoy or transmit, excepting such rights (if any) as are specially excepted in the letters of naturalization granted to him.

Any person who has been previously naturalized in the United Kingdom, or any British possession, may obtain letters of naturalization in New Zealand upon presentation of his certificate or letters to the Governor, with satisfactory evidence of his *bona fides*.

An alien woman married to a natural-born or naturalized British subject shall be deemed to be herself naturalized. Where the father, or the mother, being a widow, has become naturalized in New Zealand, every child of such father or mother who during minority resides with such parent shall also be deemed to be naturalized.

Every alien resident in New Zealand may inherit or otherwise acquire, hold, and dispose of every description of property in the same manner as if he were a natural-born British subject, but may not become the owner of any ships, or of a share in any ship, registered in New Zealand. Any person born in foreign territory whose mother is a natural-born British subject shall be capable of acquiring property in New Zealand by purchase, or under a will or intestacy.

No fee is payable for naturalization except in the case of Chinese, who are charged £1.

During 1910 letters were granted to 159 males and 7 females belonging to the following nationalities:—

Natives of—	M.	F.	Natives of—	M.	F.
Austria-Hungary ..	47	..	Greece	4	..
Germany	16	2	Belgium	4	..
Denmark	13	..	France	6	1
Sweden.. ..	18	..	Italy	7	1
Norway	14	1	United States of America ..	5	1
Russian Empire ..	9	..	Other countries	8	1
Syria	3	..			
Switzerland	5	..	Total	159	7

The number of natives of each country naturalized during the last twenty-seven years is next shown.

Natives of—	Persons.	Natives of—	Persons.
Germany	1,883	Portugal	73
Sweden and Norway ..	1,561	Austria-Hungary ..	1,041
Denmark	1,048	Greece	77
Russia in Europe ..	367	China	418
France	181	United States of America ..	126
Belgium	47	Other countries	237
Netherlands	77		
Switzerland	235	Total	7,663
Italy and Sicily	292		

SECTION XIX.—CROWN LANDS.

A SUMMARY of the transactions during the year ended 31st March, 1911, will be found in the following table, which shows under all descriptions of tenure the number of selectors and the area selected :—

Nature and Tenure of Lands selected during the Year ended the 31st March, 1911.					Number of Purchasers or Selectors.	Area.
						A. R. P.
Ordinary Crown Lands—						
Cash lands	...	...	...	...	258	9,527 3 11
Occupation with right of purchase	...	...	...	...	473	131,001 1 1
Lease in perpetuity	...	...	...	...	15	1,876 3 24
Renewable lease (town and rural)	...	...	...	...	33	5,477 3 12
Mining districts land-occupation leases	...	...	...	...	73	2,686 3 19
Village settlement, cash	...	...	...	...	4	3 3 3
" occupation with right of purchase	...	...	...	...	3	1 3 10
" renewable lease	...	...	...	...	6	38 0 32
Improved-farm special settlement	...	...	...	...	22	5,003 2 28
Pastoral runs	...	...	...	...	52	644,695 0 37
Pastoral licenses in mining districts under special regulations	...	...	...	...	64	17,053 3 23
Miscellaneous leases	...	...	...	...	490	64,076 2 19
Totals	...	...	...	...	1,493	881,443 3 19
Cheviot Estate—						
Renewable lease...	...	...	...	...	1	11 0 7
Miscellaneous leases	...	...	...	...	1	0 0 28
Totals	...	...	...	...	2	11 0 35
Land for Settlements—						
Cash lands	...	...	...	...	12	16 0 34
Renewable lease	...	...	...	...	223	26,375 0 34
Small grazing-runs	...	...	...	...	1	219 2 30
Pastoral runs	...	...	...	...	1	30 0 0
Miscellaneous leases	...	...	...	...	23	1,413 2 9
Totals	...	...	...	...	260	28,054 2 27
National Endowment Lands—						
Renewable lease	...	...	...	...	332	91,854 0 14
Village renewable lease	...	...	...	...	16	351 1 18
Improved-farm special settlement	...	...	...	...	1	160 0 0
Small grazing-runs	...	...	...	...	21	128,544 0 0
Pastoral runs	...	...	...	...	10	249,194 0 0
Pastoral licenses in mining districts under special regulations	...	...	...	...	42	10,367 0 39
Miscellaneous leases	...	...	...	...	89	22,289 0 32
Totals	...	...	...	...	511	502,759 3 23
Thermal springs	...	...	...	...	1	473 0 11
Grand totals...	...	...	...	...	2,267	1,412,742 2 35

Particulars of the number of selectors at present holding lands under the several tenures, together with the yearly rental payable, are given in the next table.

TOTAL NUMBER OF SELECTORS, WITH AREA SELECTED OR HELD, THE YEARLY RENT PAYABLE, AND RENT IN ARREAR, ON 31ST MARCH, 1911.

Tenure.	Total Number of Selectors.	Total Area held.		Total Yearly Rental or Instalment payable		
<i>Ordinary Crown Lands—</i>		A.	R. P.	£	s.	d.
Deferred payment	22	9,166	0 6	514	12	2
Perpetual lease	445	77,048	0 3	2,700	3	5
Occupation with right of purchase	5,119	1,723,418	3 15	86,470	18	7
Lease in perpetuity	5,036	1,463,640	1 13	46,350	2	2
Renewable lease	153	25, 11	0 16	1,897	5	8
Agricultural lease	17	551	1 0	23	7	9
Mining districts land occupation leases	604	23 552	2 8	1,400	10	4
<i>Village settlements—</i>						
Deferred payment	8	163	1 6	18	11	0
Perpetual lease	95	1,424	3 9	194	3	8
Occupation with right of purchase	31	60	3 33	16	3	0
Lease in perpetuity	1,053	22,193	2 23	3,933	18	10
Renewable lease	120	789	2 24	467	4	8
<i>Village homestead special settlements—</i>						
Perpetual lease	253	4,177	3 35	582	6	2
Lease in perpetuity	345	9,113	0 33	1,064	4	5
<i>Special-settlement associations—</i>						
Perpetual lease	10	669	0 8	48	4	0
Lease in perpetuity	653	114,778	2 11	6,166	6	2
<i>Improved-farm special settlements—</i>						
Occupation with right of purchase	458	63,177	2 0	2,487	7	10
Lease in perpetuity	333	41,509	3 15	3,258	4	0
Renewable lease	13	2,001	2 25	19	0	2
Small grazing-runs	253	466,371	1 2	19,476	0	11
Pastoral runs	461	6,883,836	3 19	37,143	7	6
Pastoral licenses in mining districts under special regulations	262	52,156	3 13	1,105	12	3
Miscellaneous leases	3,758	660,417	0 21	14,803	14	9
Totals	19,502	11,645,430	1 18	230,141	9	5
<i>Cheviot Estate—</i>						
Lease in perpetuity	118	24,387	2 2	6,424	7	6
Renewable lease	1	11	0 7	14	1	4
Village-homestead special settlement	92	2,480	1 0	870	10	4
Grazing-farms	49	45,762	2 24	6,828	12	8
Pastoral runs	1	1,642	0 0	193	3	8
Miscellaneous	45	1,090	3 11	203	17	5
Totals	306	75,374	1 4	14,534	12	11

TOTAL NUMBER OF SELECTORS, ETC.—*continued.*

Tenure	Total Number of Selectors.	Total Area held.		Total Yearly Rental or Instalment payable.	
<i>Land for Settlements—</i>		A	B. P.	£	s. d.
Lease in perpetuity	3,591	662,125	1 1	193,195	8 10
Renewable lease	852	266,456	0 2	59,100	13 0
Lease in perpetuity (village) ..	46	438	1 28	333	12 8
Renewable lease (village) ..	2	9	2 16	8	15 6
Special-settlement associations	11	2,114	1 9	162	7 8
Small grazing-runs	115	202,358	2 38	26,653	14 2
Pastoral runs	3	983	2 38	130	13 0
Miscellaneous	215	7,853	2 4	1,616	8 10
Totals	4,835	1,142,339	2 16	281,201	13 8
<i>National Endowment Lands—</i>					
Renewable lease—					
Ordinary	1,059	286,177	0 25	12,443	13 5
Village settlement	114	1,254	3 13	427	9 10
Village homestead special settle- ment	9	104	3 9	12	16 11
Improved-farm special settle- ment	33	5,407	1 20	120	2 0
Small grazing-runs	481	1,541,439	0 1	27,925	0 1
Pastoral runs	225	4,030,748	2 37	34,617	8 2
Pastoral licenses in mining dis- tricts under special regulations	185	31,964	1 21	678	18 10
Miscellaneous leases	442	194,741	3 4	1,443	4 4
Totals	2,548	6,091,838	0 10	77,668	13 7
Thermal Springs (Rotorua) ..	305	6,527	1 13	2,159	12 4
Grand totals	27,496	18,961,509	2 21	605,706	1 11
Endowments (ordinary)	889	410,598	3 29	15,090	14 10
Workers' dwellings—					
Ordinary Crown lands	35	5	3 30	*88	0 9
Land for settlements	81	14	1 0	*179	3 4

* Monthly rent.

Tables I and II, which follow, exhibit the acreage of land *taken up for settlement*, and the number of holdings under each description of tenure. The lands held under pastoral license and miscellaneous leases, such as for timber and flax-cutting, coal-mining, &c., are *not included* in these tables. Tables III and IV show the total acreage taken up year by year since March, 1901, in each land district, and the number of holdings grouped according to size, the areas varying from less than one acre in extent to 1,000 acres and over.

The forfeitures and surrenders in respect of the lands taken up for settlement (excluding, as already remarked, pastoral and miscellaneous leases) for the last ten years were:—

1901-2	..	..	..	192 holdings	75,368 acres.
1902-3	..	..	..	329 "	106,390 "
1903-4	..	..	..	354 "	105,625 "
1904-5	..	..	..	180 "	89,451 "
1905-6	..	..	..	154 "	36,698 "
1906-7	..	..	..	324 "	74,841 "
1907-8	..	..	..	269 "	50,810 "
1908-9	..	..	..	189 "	54,113 "
1909-10	..	..	..	315 ["	118,142 "
1910-11	..	..	..	276 "	55,964 "

Forfeited and surrendered lands are again thrown open for selection as soon as possible, and in the majority of cases are taken up again by fresh selectors within a short time.

A full description of the various tenures under which land is dealt with is given in the article entitled "The Land System of New Zealand," in Part III of this book.

L.—COMPARATIVE TABLE SHOWING ACREAGE OF LANDS SELECTED UNDER SETTLEMENT CONDITIONS (EXCLUDING PASTORAL RUNS, MISCELLANEOUS LEASES AND LICENSES, ENDOWMENTS AND THERMAL SPRINGS DISTRICT LEASES) DURING TEN YEARS ENDED 31ST MARCH, 1911.

	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.	1906-7.	1907-8.	1908-9.	1909-10.	1910-11.
Cash lands	Acres. 27,290	Acres. 17,194	Acres. 22,481	Acres. 18,991	Acres. 11,132	Acres. 20,357	Acres. 28,519	Acres. 42,177	Acres. 8,874	Acres. 9,546
Deferred payments	..	..	..	..	..	..	..	..	..	..
Perpetual lease and small areas	..	..	..	..	..	..	..	..	..	..
Occupation with right of purchase	..	..	..	..	..	..	..	..	..	..
Lease in perpetuity	128,893	118,557	146,953	135,206	157,432	215,530	187,799	123,116	108,152	131,001
Renewable lease	116,125	181,745	194,515	173,811	158,019	154,237	98,357	106,184	1,011	1,877
Agricultural lease	..	..	..	..	..	..	70,535	21 8 0.5	178,036	123,718
Mining Districts Land Occupation leases	..	..	..	..	..	..	84	..	..	..
Village settlement—	2,507	2,434	4,972	1,914	1,194	1,044	3,047	1,490	2,068	2,687
Cash	10	9	8	1	40	20	3	17	12	4
Occupation with right of purchase	..	..	..	..	..	..	..	..	..	..
Lease in perpetuity	456	619	514	208	1,936	1,012	2,302	..	..	2
Renewable lease	..	..	..	..	..	..	108	..	..	..
Village-homestead special settlement	..	..	..	..	..	..	..	1,167	468	389
Special-settlement associations (lease in perpetuity)	..	..	..	..	..	..	..	..	..	..
Special-settlement improved farms	..	..	..	..	..	..	..	..	..	..
Small grazing-runs and grazing-farms	1,618	4,032	19,436	1,459	547	5,622	410	..	40,005	5,163
	112,947	113,925	144,786	67,271	68,587	114,854	226,757	28,980	498,491	128,763
Totals	390,406	425,824	534,679	402,413	399,342	512,859	617,934	521,145	637,120	403,150

NOTE.—The forfeitures and surrenders for the years dealt with in the table were—for the year 1901-2, 75,364 acres; 1902-3, 106,380 acres; 1903-4, 105,621 acres; 1904-5, 88,461 acres; 1905-6, 36,698 acres; 1906-7, 74,841 acres; 1907-8, 50,810 acres; 1908-9, 54,113 acres; 1909-10, 118,142 acres; and for 1910-11, 53,964 acres. But it must not be supposed that these relate to the acreages taken up during the same years; on the contrary forfeitures may have their origin in selections of long standing and various dates.

II.—COMPARATIVE TABLE SHOWING NUMBER OF SELECTORS OF LAND UNDER SETTLEMENT CONDITIONS (EXCLUDING PASTORAL RUNS, MISCELLANEOUS LEASES AND LICENSES, ENDOWMENTS AND THERMAL SPRINGS DISTRICT LEASES) DURING TEN YEARS ENDED 31ST MARCH, 1911.

	1901-2	1902-3	1903-4	1904-5	1905-6	1906-7	1907-8	1908-9	1909-10	1910-11.
For cash	No. 489	No. 374	No. 435	No. 371	No. 229	No. 447	No. 404	No. 371	No. 378	No. 270
Deferred payments	..	..	..	..	..	..	..	..	..	..
Perpetual lease and small areas	..	..	..	..	..	..	..	..	..	..
Occupation with right of purchase	..	..	..	..	..	..	..	..	..	..
Lease in perpetuity	..	..	..	..	..	..	..	..	..	..
Renewable lease	..	..	..	..	..	..	..	..	..	..
Agricultural lease	..	..	..	..	..	..	..	..	..	..
Mining districts land occupation leases	..	..	..	..	..	..	..	..	..	..
Village settlement—	..	..	..	..	..	..	..	..	..	..
Cash	..	..	..	..	..	..	..	..	..	..
Occupation with right of purchase	..	..	..	..	..	..	..	..	..	..
Lease in perpetuity	..	..	..	..	..	..	..	..	..	..
Village settlement renewable lease	..	..	..	..	..	..	..	..	..	..
Village-homestead special settlement	..	..	..	..	..	..	..	..	..	..
Special-settlement associations	..	..	..	..	..	..	..	..	..	..
Improved-farm special settlement	..	..	..	..	..	..	..	..	..	..
Renewable lease (improved-farm special settlement)	..	..	..	..	..	..	..	..	..	..
Small grazing-runs and grazing-farms	..	..	..	..	..	..	..	..	..	..
Totals ..	1,632	1,602	2,053	1,581	1,536	1,644	1,589	1,863	1,712	1,494

NOTE.—The forfeitures and surrenders for the years dealt with in the table were—for the year 1901-2, 192 holdings; 1902-3, 323 holdings; 1903-4, 354 holdings; 1904-5, 180 holdings; 1905-6, 154 holdings; 1906-7, 921 holdings; 1907-8, 269 holdings; 1908-9, 189 holdings; 1909-10, 315 holdings, and 1910-11, 276 holdings. See note to previous table as to the origin of these failures.

III.—LANDS TAKEN UP UNDER SETTLEMENT CONDITIONS DURING TEN YEARS ENDED 31ST MARCH, 1911 (EXCLUSIVE OF PASTORAL RUNS, MISCELLANEOUS LEASES AND LICENSES, ENDOWMENTS, AND THERMAL SPRINGS DISTRICT LEASES).*

Land District.	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.	1906-7.	1907-8.	1908-9.	1909-10.	1910-11.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Auckland ..	99,824	153,559	134,375	120,351	102,809	166,315	124,139	86,349	91,019	102,348
Hawke's Bay ..	71,902	38,505	99,153	40,949	55,215	19,686	30,038	48,002	40,369	35,926
Taranaki ..	23,942	39,353	69,236	63,005	35,505	90,453	45,431	30,192	52,831	16,639
Wellington ..	14,300	13,268	25,432	53,135	43,063	64,582	74,646	25,558	55,329	23,361
Nelson ..	29,383	11,237	16,981	10,340	22,172	25,009	45,203	203,809	35,569	42,644
Marlborough ..	64,624	56,681	33,332	20,795	54,031	10,711	5,244	5,293	10,859	3,727
Canterbury ..	11,575	45,401	78,363	4,487	13,418	22,208	17,560	35,599	29,904	8,609
Westland ..	27,214	4,112	4,098	20,202	15,813	14,633	12,305	7,313	6,526	6,600
Otago ..	23,462	50,176	51,783	38,487	29,988	82,175	250,847	70,343	298,341	139,517
Southland ..	24,180	13,532	21,926	30,662	27,326	17,081	12,521	8,687	16,373	23,773
Totals..	390,406	425,824	534,679	402,413	399,340	512,853	617,934	521,145	637,120	403,149

IV.—HOLDINGS TAKEN UP UNDER SETTLEMENT CONDITIONS DURING TEN YEARS ENDED 31ST MARCH, 1911 (EXCLUSIVE OF PASTORAL RUNS, MISCELLANEOUS LEASES AND LICENSES, ENDOWMENTS, AND THERMAL SPRINGS DISTRICT LEASES), CLASSIFIED ACCORDING TO SIZE.

Size.	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.	1906-7.	1907-8.	1908-9.	1909-10.	1910-11.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Under 1 acre ..	195	182	363	246	221	262	290	381	267	204
1 to 50 acres ..	553	466	467	997	983	400	404	462	421	396
51 to 250 acres ..	471	496	624	450	444	432	382	414	585	549
251 to 500 acres ..	244	237	322	280	256	222	227	276	221	196
501 to 1,000 acres ..	110	157	190	131	158	201	157	237	137	90
1,001 acres and upwards ..	59	64	87	77	74	127	129	93	81	59
Totals ..	1,632	1,602	2,053	1,581	1,536	1,644	1,589	1,863	1,712	1,494

* See notes as to forfeitures and surrenders on previous tables I and II.

SECTION XX. — LAND FOR SETTLEMENTS, LAND-SETTLEMENT ASSOCIATIONS, AND ADVANCES TO SETTLERS

A FULL description is given, in a special article in Section I, Part III, of the objects and methods of the Land for Settlements Act, under which the Government is authorized to purchase lands previously alienated for the purpose of subdividing and leasing in small areas.

LAND FOR SETTLEMENTS.

The report of the Board of Land Purchase Commissioners on transactions for the year ended the 31st March, 1911, states:—

“ During the period there were 81 properties (containing 350,708 acres) offered, of which 14 (containing 14,399 acres) were purchased, and nearly all have been taken delivery of and settled.

“ The actual expenditure was £158,796, making a total of £5,566,588 since the Act came into operation in 1892, for the purchase of estates containing 1,252,495 acres.

“ By far the largest number of the properties offered were from Canterbury, and, although at prices considered high, still not so excessive as those demanded further north. The Board, however, did not feel justified in recommending any great area for purchase, as the margin between the purchasing and letting value was not considered sufficient to warrant the State accepting the responsibility of placing settlers upon the land.

“ One important transaction the Board was pleased to conclude was the exchange of some 2,500 acres of freehold lands belonging to the trustees of the late Mr. J. B. Acland, Mount Peel Station, Canterbury, for Crown lands adjoining the balance of their freehold. These freeholds were early selections, and ‘gridironed’ through the Crown leaseholds; therefore it was very important they should be secured. In addition, the trustees are to surrender in February next some 50,000 acres of Crown lands of which they hold the lease until 1917, and for which they are to receive valuation for improvements in the shape of Crown lands and an extended lease for twenty-one years of some 35,100 acres, the greater proportion of which is summer country only. The area surrendered with freeholds will provide a considerable number of excellent small runs.

“ Since the close of the year the Waihao Downs property, renamed the ‘Douglas’ Settlement, has been satisfactorily disposed of.

“ The purchase of the Sherwood Downs Estate, near Fairlie, and the Conical Hills Estate, near Tapanui, has also been concluded. The former consists of 11,842 acres of freehold, nearly all agricultural, and the lease of 45,000 acres of Crown lands adjoining. The latter contains 10,518 acres, the largest proportion being good agricultural land. Delivery of both properties will be in February

and March next. These estates will provide room for a considerable number of settlers, and should be largely competed for.

"It is evident that there is an unsatisfied demand for land, and every endeavour is being made to meet such; but at the same time the interests of the Dominion, as well as of the settlers, have to be considered."

The Land for Settlements Account at the 31st March, 1911, stands as follows:—

Dr.	£	Cr.	£
Loans current ..	5,910,912	Purchase-money ..	5,566,588
Rents, &c., received ..	2,276,548	Incidental expenses ..	513,735
		Interest ..	1,773,288
		Sinking fund ..	280,451
		Balance ..	53,398
	<u>£8,187,460</u>		<u>£8,187,460</u>

NUMBER, AREA, AND COST OF ESTATES ACQUIRED TO 31ST MARCH, 1911.

Land District.	Number.	Area.	Purchase-money.	Incidental Expenses, Improvements, Roads, &c.
		Acres.	£	£
Auckland ..	28	279,198	455,675	85,886
Hawke's Bay ..	26	193,415	1,205,674	88,835
Taranaki ..	4	4,609	79,363	6,103
Wellington ..	26	60,824	473,999	64,182
Marlborough ..	9	116,364	355,017	46,544
Nelson ..	2	24,347	29,975	2,851
Westland ..	2	5,125	8,343	2,915
Canterbury ..	73	307,755	1,775,867	81,420
Otago ..	32	203,936	969,288	89,110
Southland ..	7	56,922	213,387	20,000
Totals ..	209	1,252,495	5,566,588	487,846

AREA OCCUPIED, ANNUAL RENTAL, AREA UNLET, AND RENTAL VALUE OF UNLET LANDS ON 31ST MARCH, 1911.

—	Area occupied.			Annual Rent payable.		Area unlet.			Annual Rental Value of unlet Lands.	
	A.	R.	P.	£	s. d.	A.	R.	P.	£	s. d.
Auckland ..	180,696	0	25	21,563	12 6	87,949	2	15	3,258	16 9
Hawke's Bay ..	189,308	2	15	62,111	19 6	2,092	2	16	620	4 3
Taranaki ..	4,418	1	39	3,585	17 3	108	2	7	215	11 0
Wellington ..	54,630	1	19	19,278	8 0	5,022	3	2	1,568	5 5
Nelson ..	20,153	0	9	1,956	7 6	3,462	0	0	155	11 2
Marlborough ..	109,873	2	38	20,059	9 11	3,846	2	10	217	3 10
Westland ..	5,020	1	26	542	5 10	..	..	..	..	..
Canterbury ..	321,241	2	5	89,991	13 10	912	3	13	652	10 8
Otago ..	201,045	0	6	50,375	3 6	513	2	27	61	13 9
Southland ..	55,809	0	34	11,636	15 10	283	2	8	49	4 0
Totals ..	1,142,196	2	16	281,101	13 8	104,192	0	18	6,799	0 10

NUMBER OF SELECTORS, HOUSES, PERSONS RESIDENT, VALUE OF IMPROVEMENTS AND TOTAL AMOUNT ADVANCED TO SETTLERS FOR BUILDINGS, &c., UNDER THE LAND FOR SETTLEMENTS ACTS, AS ON 31ST MARCH, 1911.

District.	Number of Selectors.	Number of Houses on Holdings.	Number of Persons resident on Holdings.	Value of Improvements.			Total Amount advanced to Selectors for Buildings, &c.		
				£	s.	d.	£	s.	d.
Auckland ..	875	723	3,054	251,965	0	0	2,166	5	0
Hawke's Bay ..	644	574	2,521	381,360	10	7	..		
Taranaki ..	51	43	211	12,166	0	0	337	10	0
Wellington ..	374	360	1,541	153,658	0	0	2,510	0	0
Nelson ..	33	28	89	13,367	5	0	..		
Marlborough ..	369	250	1,090	180,708	6	1	..		
Westland ..	31	21	106	13,661	0	0	..		
Canterbury ..	1,414	1,206	5,435	573,850	7	11	2,760	10	0
Otago ..	775	586	2,373	279,182	1	11	..		
Southland ..	268	236	1,083	83,949	6	9	..		
Totals ..	4,834	4,027	17,503	1,943,867	18	3	7,774	5	0

THE LAND SETTLEMENT FINANCE ACT.

This Act was passed by the General Assembly on 24th December, 1909, and came into force on the 1st January, 1910. Regulations prescribing the mode of procedure and the forms to be used were published in the *New Zealand Gazette* of 3rd March, 1910. An amending Act was passed on the 3rd December, 1910.

The object of the Act is to enable parties or associations of intending land-purchasers to acquire freehold lands for subdivision among themselves, payment to be made through the issue of State-guaranteed debentures. The system is described more fully in Part III, Section I, of this volume.

The report of the Board of Land Purchase Commissioners for the year ended the 31st March, 1911, states:—

“The operations of the Land Settlement Finance Act may be considered as highly satisfactory. The Act has really only been in existence for a year, and already eleven associations have been

incorporated with a membership of sixty-eight members and an area of 9,153 acres, valued at £132,802.

“There are nine other associations under consideration. Some ten have been declined for various reasons—a few on account of their unsuitability, but the largest number owing to the high value placed upon the land. There is a tendency amongst members to enter into the agreement without first making themselves thoroughly conversant with its provisions. Probably the desire to get a piece of land without any great immediate outlay has something to do with this. Notwithstanding an agreement, the Board has in nearly every instance secured a material reduction on the price agreed upon, and at the same time arranged for a more equal apportionment of the purchase-money and a better division of the area.

“The amendments passed last session have simplified the preliminary proceedings, but there are still several defects in the Act which should be remedied.

“The Board finds that the intention of the Act as regards residence is not in all cases being complied with. To effectually meet this, and at the same time to insure the expenditure of a reasonable amount on buildings, it is recommended that a deposit not exceeding 10 per cent. of the purchase-money should be deposited at the time of application, and, upon the certificate of the Commissioner of Crown Lands for the district that buildings to a like amount have been erected, such sum or part thereof shall be refunded as payment towards the cost of such buildings, any surplus to go towards reduction of purchase-money.

“It is pleasing to say that the *personnel* of the members of the associations is, in the opinion of the Board, highly satisfactory, and that they are likely to do full justice to their allotments.

“Judging from the number of inquiries for information, the provisions of the Act are becoming better known. Therefore, as time goes on, it is anticipated that large areas will be successfully settled under this Act.”

The following table shows the Land-settlement Finance Associations incorporated to 31st March, 1911:—

Association.	Locality.		Area.	Purchase-money.	Number of Members.	Area of Allotment.
	AUCKLAND.		Acres.	£		Acres.
Eureka ..	..	Eureka ..	..	15,870	5	100, 188, 200, 185, 151.
Tainui ..	..	Matangi ..	..	6,520	5	112, 50, 50, 82, 172.
Komata South ..	..	Komata South ..	..	9,990	5	176, 158, 89, 104, 131.
Hikutaia ..	..	Hikutaia ..	..	7,668	8	180, 180, 129, 110, 145, 95.
Melrose ..	..	Te Aroha ..	..	6,466	5	169, 169, 176, 176, 168.
Martha ..	..	Hinuera ..	..	11,628	11	198, 193, 184, 184, 200, 200, 100, 100, 200, 200.
	HAWKE'S BAY.		5,583	58,187	39	
Korokipo ..	..	Korokipo ..	..	16,630	7	64, 102, 79, 162, 101, 112, 50.
	WELLINGTON.		672	18,880	6	130, 141, 145, 133, 123.
Nikau Grange ..	..	Ashhurst ..	..	16,948	5	150, 184, 191, 150, 132.
Moorfield ..	..	Kimbolton ..	..	85,778	11	
	CANTERBURY.		1,479			
Brookland.. ..	..	Winchester ..	..	9,621	5	53, 68, 93, 65, 121.
Waitohi Downs ..	..	Temuka ..	..	12,636	6	178, 197, 200, 233, 223.
			1,421	22,257	11	
			9,153	132,802	68	

GOVERNMENT ADVANCES TO SETTLERS.

A notable feature in the legislation of the year 1894 was the passing of the Government Advances to Settlers Act, a description of which, with its amending Acts, will be found in Part III.

During the year ended 31st. March, 1911, applications for 4,957 loans were received, amounting to £2,122,749. The advances granted during the year numbered 3,571, aggregating £1,282,880. The number of borrowers and the sum actually advanced during the year, classified according to amount, was:—

Category.	Number of Advances.	Amount advanced. £
Not exceeding £500	2,730	794,365
Exceeding £500, but not exceeding £1,000 ..	352	261,915
" £1,000, " £2,000 ..	92	126,380
£2,000, " £3,000 ..	9	21,650
Totals	3,183	£1,204,310

The nature of the security upon which these advances were made was as follows:—

Security.	Number of Advances.	Amount advanced. £
Freehold	2,019	762,705
Leasehold	1,139	431,465
Freehold and leasehold combined ..	25	10,140
Totals .. .	3,183	£1,204,310

The total loans authorized to the 31st March, 1911, classified according to provincial districts, are shown in tabular form:—

Provincial Districts.	Number of Applications.	Amount of Advances authorized.
		£
Auckland	8,853	2,801,268
Taranaki	4,261	1,898,169
Hawke's Bay	1,558	463,465
Wellington	8,314	3,118,868
Marlborough	936	382,800
Nelson	489	148,515
Westland	677	162,770
Canterbury	2,903	944,435
Otago—		
Otago portion	1,933	743,370
Southland portion	2,382	859,185
Totals	32,306	11,528,145

Of the total advances authorized, 3,415 applicants declined the grants (£1,347,910) offered them, so that the net advances to the 31st March, 1911, numbered 28,891, and amounted to £10,180,235.

The total sum raised by the Government for investment on mortgage is £7,094,935. Sixteen thousand and five mortgagors are indebted to the Department to the extent of £6,145,229 in respect of principal moneys.

The advances outstanding, classified according to amount, are as follows:—

Category.	Number of Advances.	Amount outstanding. £
Not exceeding £500	12,591	2,533,275
Exceeding £500, but not exceeding £1,000 ..	2,238	1,777,497
“ £1,000, “ £2,000 ..	1,014	1,403,048
“ £2,000, “ £3,000 ..	162	431,409
Totals	16,005	£6,145,229

The nature of the security for the total amount of advances outstanding on 31st March, 1911, was:—

Security.	Number of Advances.	Amount outstanding. £
Freehold	9,747	4,541,572
Leasehold	6,036	1,473,402
Freehold and leasehold combined ..	222	130,255
Totals	16,005	£6,145,229

The following table shows the transactions of the Advances to Settlers Office during each of the financial years ended 31st March, 1907–11, and the total transactions to the latter date.

ADVANCES TO SETTLERS.—TRANSACTIONS DURING EACH OF THE FIVE FINANCIAL YEARS 1907–11, AND THE TOTAL TO 31ST MARCH, 1911.

Transactions.	1906-7.	1907-8.	1908-9.	1909-10.	1910-11.	Total to 31st March, 1911.
Loans raised ... £	150,000	550,000	903,800	610,000	1,351,135	7,094,935
Applications received No.	2,420	3,183	4,471	4,131	4,957	40,955
Amount ... £	999,461	1,668,133	2,050,252	1,539,150	2,122,749	16,285,896
Applications granted No.	2,098	2,955	3,078	3,201	3,571	32,306
Amount ... £	819,190	1,355,450	1,202,995	1,038,340	1,282,880	11,528,145
Amounts advanced ... £	767,731	1,197,416	1,493,836	1,095,120	1,204,310	10,547,970
Amounts repaid ... £	340,111	568,655	559,163	545,528	726,714	4,402,741

The gross profits for the year ended the 31st March, 1911, were £71,324, and the cost of management £10,831, being 0·15 per cent., or 3s. per £100 on the capital employed. The net profits amounted to £60,441.

The liabilities and assets at 31st March, 1911, of the Government Advances to Settlers Office were:—

<i>Liabilities.</i>	£	s.	d.	<i>Assets.</i>	£	s.	d.
3-per-cent. loans, redeemable				Investment Account—			
1st April, 1945	2,000,000	0	0	Advances on	£	s.	d.
Sundry loans	5,094,935	0	0	mortgage	10,547,970	0	0
Accrued interest payable on				Less repay-			
deposits	20	15	10	ments ...	4,406,986	2	4
Accrued interest payable on							
account of loans	43,446	6	5	Mortgage instalments receiv-	6,140,983	17	8
Reserve Fund	50,000	0	0	able—Overdue	4,245	3	7
Suspense Account	5,350	18	5	Interest receivable—Overdue	16,385	19	7
Advances Suspense Account	19,179	2	4	Interest receivable—Accrued	50,189	6	6
Fire Loss Suspense Account	5,605	6	2	Office Furniture Account ...	428	17	11
Profit and Loss Account ...	190,767	3	2	Insurance Premiums Account	316	13	10
				Amounts transferred to			
				Workers' Branch	325,000	0	0
				Sinking Fund Account ...	176,311	14	8
				Cash in hand and in bank ...	695,442	18	7
	£7,409,304	12	4		£7,409,304	12	4

SECTION XXI.—GOVERNMENT VALUATION OF LAND.

PRIOR to the passing of the Government Valuation of Land Act, 1896 (now incorporated in the Valuation of Land Act, 1908), there was an entire absence of uniformity in the system of making valuations of land for Governmental purposes. Each lending Department employed a separate set of local valuers for valuing mortgage securities. The Land-tax Department periodically employed a small army of temporary valuers when it required a new valuation of land for taxation purposes, and each local authority had its own particular method of making up its roll for the levying of rates.

All values required by the Government Departments mentioned below and by local bodies, whether for loan, taxation, or other purposes, are now made by valuers employed by the State. These valuers work upon the one system laid down by statutory enactment, and are responsible to the Government alone. They receive a regular salary, and when valuing for loan purposes are not dependent for their remuneration upon the good-will of the person whose property they are valuing.

Under the existing law the Valuer-General is required to prepare valuation rolls, showing the selling-value of all land in the Dominion.

Briefly stated, the following are the chief purposes for which the roll values may be used:—

- (1.) As a basis on which loans may be granted by—
 - (a.) The New Zealand State-guaranteed Advances Office.
 - (b.) The Public Trust Office.
 - (c.) The Government Insurance Office.
 - (d.) The Post Office.
 - (e.) The Commissioners of Public Debt Sinking Funds.
 - (f.) Such other public offices as the Governor from time to time directs.
 - (g.) Trustees and investors.
- (2.) As a basis for the advancement of loans to local bodies by the State-guaranteed Advances Office.
- (3.) As a basis for the levying of land-tax and local rates.
- (4.) As a basis on which to assess stamp duty and duty on deceased persons' estates.
- (5.) For the guidance of the Land Purchase Board when acquiring land under the Land for Settlements Act or the Public Works Act on behalf of the Government.

- (6.) For the guidance of all who may desire to ascertain the selling-value of any piece of land for investment, mortgage, or other purpose.

In view of the many and diverse purposes for which the roll values may be used, it is of the utmost importance that these values should be neither above nor below the fair market price, and it is as much to the interest of the owner as it is to that of the Department that the "unimproved value," "value of the improvements," and "capital value" of every property should be accurately entered in the roll.

The Act states that the "unimproved value of any piece of land means the sum which the owner's estate or interest therein, if unencumbered by any mortgage or other charge thereon, and if no improvements existed on that particular piece of land, might be expected to realise at the time of valuation if offered for sale on such reasonable terms and conditions as a *bona fide* seller might be expected to require."

There are few terms used in connection with land-valuation which are more imperfectly understood than the term "unimproved value." Some interpret the term to mean the original value of the land at the time when it was in its unimproved state, while others understand it to mean the *present* value, assuming all the land in the district to be unimproved. Neither of these interpretations is correct. The increased value attaching to any piece of land due to the successful working of other lands in the district, or to progressive works effected by the State, the general prosperity of the country, high markets for produce, &c., forms portion of the unimproved value under the New Zealand law. Any increased value, however, which is represented by the improvements effected by the individual possessor does not form part of the unimproved value.

Land-tax is levied on the unimproved value, and so also are the local rates in districts where the rating on unimproved values system is in force. It is therefore particularly necessary that uniformity of unimproved values should be studied by the valuer, otherwise one owner would be rated unfairly in comparison with his neighbour.

The definition of "improvements" and "value of improvements" is as follows:—

"'Improvements' on land means all work actually done or material used thereon by the expenditure of capital or labour by any owner or occupier of the land, nevertheless in so far only as the effect of such work or material used is to increase the value of the land, and the benefit thereof is unexhausted at the time of valuation; but shall not include work done or material used on or for the benefit of land by the Crown or by any statutory public body, unless such work has been paid for by the contribution of the owner or occupier for that purpose: Provided that the payment

of rates or taxes shall not be deemed to be a contribution within the meaning of this definition."

"'Value of improvements' means the sum by which the improvements upon an owner's land increases its value: Provided that the value of improvements shall in no case be deemed to be more than the cost of such improvements estimated at the time of valuation, exclusive of the cost of repairs and maintenance."

Subject to the limitations contained in the above definition, all buildings, fences, planting, draining, private roads and water-races, clearing, permanent grassing, and other work of a permanent nature effected upon land are improvements.

The valuer must be guided, when valuing details of improvements, by the terms of the above definitions, and it is necessary, therefore, that the limitations referred to should be considered in detail. Anything which can be valued as an improvement must in the first place be effected *upon* the land which is benefited by that improvement. A public road may be made by an owner for the purpose of increasing the value of his land. This road would not be valued as an improvement, as it is not on the land and is not included in the area which is valued. Were the road a private one, however, such as a farmer would make through his farm for the convenient working of his holding, it would be included in the total area valued, and would then be also valued as an improvement. Improvements can only be valued *to the extent to which they increase the selling-value of the land*. Sometimes an owner will expend his capital and labour injudiciously, and the result will prove detrimental to the land instead of being an improvement. Some lands hold grass better without being first ploughed than they do after the plough. The effect of ploughing in such cases would not be to improve the selling-value. Some improvements, such as ornamental shrubbery, orchards, lawns, vineries, &c., rarely increase the selling-value to the full extent of their cost, and are therefore valued accordingly.

The definition also states that no work can be considered an improvement if the benefit is exhausted at the time of valuation. The Government lends money on the security of improvements, and it is obvious that if exhausted improvements were included in the valuation the security would be a very poor one.

Draining and orchards are improvements which frequently become exhausted. As long as a drain is effective and acts as a drain it necessarily adds to the selling-value and is an improvement; but an open drain which was cut many years ago and has become filled in and grassed over, owing to the necessity for it having passed away, would be considered as exhausted.

From the foregoing it will be seen that it devolves upon a valuer to ascertain carefully the *condition* of an improvement before estimating its value.

The expenditure of loan-moneys by the Crown or by public bodies is for the benefit of the community or district, and not for the exclusive benefit of any individual or holding.

It would be beyond the powers of any valuer to apportion the value of a public street, railway, telegraph-line, or, in fact, any public work amongst the different holdings which derived benefit from that work.

The amount at which improvements must be valued is defined by the Act as the sum by which they increase the selling-value of the land, *provided that the value must not exceed the cost*, although it may be below the cost. The cost of an improvement is not necessarily its selling-value, as its suitability and condition must be taken into consideration.

Machinery, whether fixed to the soil or not, is not an improvement, and it is not included in the capital value. The buildings containing the machinery would, however, be valued as an improvement.

“Capital value” is defined as follows:—

“‘Capital value’ of land means the sum which the owner’s estate or interest therein, if unencumbered by any mortgage or other charge thereon, might be expected to realize at the time of valuation if offered for sale on such reasonable terms and conditions as a *bona fide* seller might be expected to require.”

The fair selling-value in the open market represents the capital value, but not necessarily the auction value or value derivable at a forced sale. The valuer is required to exercise special care in fixing the capital value at such a sum as will be fair to both the borrower and the lender should the property be offered as a security.

Uniformity of capital values is of the utmost importance. Land of similar quality and position should be valued uniformly, whether in a large or a small holding.

Ratepayers frequently complain that their rates will be unduly increased when values are raised. This is not a matter which the Department has any right to consider, however much it may sympathize. Its duties under the Act are to make a roll of selling-values for various purposes. The responsibility of fixing the rate for local rating purposes rests entirely with the local body, and, if the selling-values in a district are high, it is within the power of the ratepayers themselves to see that a moderate rate is struck.

It may not be out of place to mention the relative numbers of the land-tax and local ratepayers within New Zealand, from which it will be seen that the number of persons who are interested in the amount of rate annually struck by the local body far exceeds the number who are interested in the amount of land-tax annually fixed by Parliament. There are approximately 150,000 holders of land. The total number of land-tax payers is only 33,516, while practically every holder pays local rates.

The foregoing remarks apply when valuing land, whether it is leased or not; but in the case of lands which are leased on terms favourable to the lessee the valuer has, in addition, the important duty of determining what proportion of the value belongs to the owner and what proportion to the lessee.

The principle on which lessees' and sublessees' interests are to be determined is contained in the Valuation of Land Act, 1908.

Special provision is contained in the Act for adjusting the relative interests of owner and lessee year by year, and this adjustment will always be made by the Valuer-General on application.

When the values appearing on a roll become out of date a revision takes place, but before any revised values can take effect the district must be gazetted for revision by Order in Council. There is no fixed period between one revision and another. The necessity for revision depends upon whether or not the roll values are correct.

When a revision of a district is ordered, the valuer makes a thorough overhaul of the unimproved values as well as the values of improvements and capital values. During the period intervening between revisions the Valuer-General cannot alter the *unimproved values* of the roll entries unless the owner pays a fee to cover the cost and demands a revaluation of his property, or in case of an admitted error having taken place. During this intervening period, however, the Valuer-General may keep values up to date by adding the value of improvements which have been put on since the revision, or by deducting the value of those taken away.

If additional improvements have been effected to a property prior to the 31st March in any year, they can be rated for the then ensuing year commencing on the 1st April. If they have been effected after the 31st March, however, they cannot be rated until the 1st April of the following year. The same rule applies to changes in occupancy. The person who is occupier on the 31st March is placed on the roll for the rates for the ensuing year, but if a person enters into possession after the 31st March his name is not entered up until the 1st April succeeding the date of occupation. Rolls are thus corrected in respect to occupancy and improvements as at the 31st March in each year, but the unimproved values must remain until a complete revision is ordered by the Governor in Council. The local authority is empowered by the Act to amend its rating roll in respect to the occupancy of land, but cannot amend values on its own authority. When a property becomes subdivided the Valuer-General divides the existing value on the roll proportionately. No alteration is made in any entry on the roll without giving the owner and occupier due notice, in order that they may object, if necessary, but the omission to give such notice does not invalidate an assessment.

It has been said that roll values are used as a guide to Government Departments when lending money. On receipt of an applica-

tion for a loan the lending Department is supplied with a copy of the existing roll value of the security. The lending Boards, however, usually require that the security should be again inspected by the valuer before they grant the loan. This necessitates a revaluation of the property, but such revaluation is not used for either taxation or rating purposes. Since the system came into force these revaluations for loan purposes have, in almost every case, exceeded the values entered on the roll.

When the values in a district have been revised the new roll is lodged for inspection at some public office, and an advertisement in the papers calls the attention of the public to the fact, so that every person interested may inspect it. At the same time every owner and occupier receives a notice showing at what value his property is entered. The omission to give notice, however, does not, as has been said, invalidate the assessment. The Department invites the fullest scrutiny of its rolls before submitting them to the Assessment Court. Persons whose names appear on the roll are invited to object if they are of opinion that the valuer has exceeded the selling-price, or for other sufficient cause. The fact that the new valuation will cause an increase in the amount of local rates or land-tax payable is not considered a sufficient cause. The Department does not fix the rate in either case, and any such objection can only be based on an assumption that the rate to be levied will be the same as previously. Neither is the fact that the new valuation shows an increase or decrease on the last valuation considered a sufficient ground of objection, as the selling-value may have increased or decreased since the last valuation was made, or the previous valuation may have been erroneous.

Objections to value can only be on the ground that the valuation does not represent the true selling-value, as that is the guide imposed by the Act. Of course, there are legitimate reasons for objection on other questions besides the question of value, such as errors in ownership, occupancy, area, or description, &c., which matters are always attended to and corrected without reference to the Assessment Court.

A frequent source of objection is that improvements are valued too high or too low. Before such an objection can be maintained it must be ascertained whether the capital value represents the fair and full selling-value. If, for instance, the capital value of a property is set below the true selling-value, the improvements will necessarily be valued in proportion. In such cases as this an increase in the value of improvements would only serve to increase the capital value, and would not reduce the unimproved value.

Objections to values are invariably referred to the valuer to enable him to review his valuation before the sitting of the Assessment Court, and the objector receives in due course a reply. If the objection has been allowed there is no necessity for the objector to appear at the Court. Should it be disallowed, he

may carry it before the Court for consideration. Due notice of the sitting of the Court is given by advertisement, as required by the Act.

If on appeal to the Court the objection is allowed, the reduction is immediately carried into the roll. If, however, the owner is not satisfied with the Court's decision he may, under section 31 of the Act of 1908, *within fourteen days of the hearing*, require the Valuer-General either to reduce to the value which he considers to be the fair selling-value or else to purchase the property *at that value*.

On the other hand, section 30 of the 1908 Act provides that if the Valuer-General is of opinion that a Court has made an unfair reduction in a valuation, he may, also within fourteen days of the hearing, require the owner to consent to what he considers is the fair selling-value, or else he will acquire the property *at that value* on behalf of the Government.

Power is also given by section 18 of the same Act to an owner to appeal to the Supreme Court on questions of law. On all other questions the decision of the Assessment Court is, however, final.

There is still another course open to an owner who is dissatisfied with his value, and he may adopt it at any time without reference to the date of sitting of the Court. Section 36 of the Act provides that an owner, by paying the fee prescribed by regulation to cover the cost, may obtain a revaluation of his property, and in such case the roll must be amended pursuant to the result of such new valuation.

TABLE SHOWING CAPITAL AND UNIMPROVED VALUES OF LAND IN NEW ZEALAND.

Year of Valuation.				Total Capital Values.	Total Unimproved Value
				£	£
1878	..	..	..	99,566,679	62,573,868
1882	..	..	..	101,000,000	..
1885	..	..	..	113,270,649	..
1888	..	..	..	111,137,714	75,497,379
1891	..	..	..	122,225,029	75,832,465
1897	..	..	..	138,591,347	84,401,244
1902	..	..	..	154,816,182	94,847,727
1904	..	..	..	182,796,241	112,629,412
1905	..	..	..	197,684,475	122,937,126
1906	..	..	..	218,422,552	137,168,548
1907	..	..	..	236,644,536	149,682,689
1908	..	..	..	253,440,172	161,324,763
1909	..	..	..	271,516,022	172,759,948
1910	..	..	..	277,630,083	175,289,861
1911	..	..	..	293,117,065	184,062,798

TABLE SHOWING NUMBER OF FREEHOLDERS OF LAND, OUTSIDE OF BOROUGHES AND TOWN DISTRICTS, CLASSIFIED ACCORDING TO AREA HELD BY THEM.

Year.	Holders of 5 Acres and under 100 Acres.	Holders of 100 Acres and under 1,000 Acres.	Holders of 1,000 Acres and under 5,000 Acres.	Holders of 5,000 Acres and under 10,000 Acres.	Holders of 10,000 Acres and under 20,000 Acres.	Holders of 20,000 Acres and under 50,000 Acres.	Holders of 50,000 Acres and over.	Total Numbers of Holders.
1883	14,766	14,267	1,281	203	141	83	23	30,764
1886	17,075	15,471	1,425	220	151	79	29	34,450
1889	18,805	16,743	1,413	221	134	89	27	37,432
1892	19,369	17,538	1,558	208	148	84	30	38,935
1902	20,799	20,316	2,144	260	123	70	23	43,735
1906	20,900	21,269	2,417	278	129	62	13	45,068
1911	21,767	21,924	2,753	307	121	39	11	46,922

The total number of freeholders, including owners of township lands, were as follows:—

In year 1883	..	..	..	..	..	71,240
" 1886	..	..	..	..	..	80,527
" 1889	..	..	..	..	..	84,547
" 1892	..	..	..	..	..	91,501
" 1902	..	..	..	..	..	115,713
" 1906	..	..	..	..	..	128,019
" 1909	..	..	..	..	..	143,243
" 1910 (approximately)	..	..	..	..	..	150,000
" 1911	..	..	..	..	..	150,000

N.B.—It should be noted that no leaseholders, Crown or otherwise, are included in the above numbers.

The result of the general valuation of land as in March, 1898, is given in the report of the Valuer-General presented to both Houses of Parliament. Since this general valuation revisions have been made, which bring the figures as corrected to represent the values on the 31st March, 1911. Comparative figures are here given for 1891 and 1911 showing the increase, and stating separately the unimproved value and the value of improvements:—

COMPARISON OF CAPITAL VALUES, 1891 AND 1911.

	1891. £	1911. £	Increase, 1891 to 1911. £
Unimproved value ..	75,832,465	184,062,798	108,230,333
Value of improvements	46,392,564	109,054,267	62,661,703
Totals ..	£122,225,029	£293,117,065	£170,892,036

In the figures for the North and South Islands the relative degree of increase is exhibited:—

CAPITAL VALUES.				
		1891. £	1911. £	Increase. £
North Island	..	57,441,115	175,485,540	118,044,425
South Island	..	64,783,914	117,631,525	52,847,611
Totals	..	£122,225,029	£293,117,065	£170,892,036

The increase for the North Island of £118,044,425 represents an advance of 205·50 per cent. on the value of 1891, and that of £52,847,611 for the South Island, 81·57 per cent. The increase for the whole Dominion as shown is £170,892,036, or 139·81 per cent. The following statement gives the capital value of land and improvements in counties and boroughs* as for 1891 and 1911 :—

CAPITAL VALUE OF LAND AND IMPROVEMENTS IN COUNTIES AND BOROUGHES.

			1891. £	1911. £
Counties ..	..	..	85,818,167	185,042,337
Boroughs*	..	..	36,406,862	108,074,728
Totals	..	..	£122,225,029	£293,117,065

The increase in the capital value of land with improvements in counties for the twenty years is £99,224,170, or 115·62 per cent.; while that for boroughs* is £71,667,866, or 196·85 per cent. But the value of property in boroughs* was added to between 1891 and 1911 by the constitution of thirty-four new boroughs, and the inclusion of twenty-six town districts, and that of the counties correspondingly reduced; so that the actual rate of increase in the value of country lands is higher than indicated by the above figures, and in urban lands considerably less. Comparisons for counties, boroughs, and town districts which under the provisions of the Town Districts Act do not form part of any county are given in the three tables next following; afterwards the gross capital value, and the capital value of rateable property in counties, town districts, and boroughs, with an indication of the system of rating adopted by the local authorities for those districts. The rateable values can be used in connection with the information given in Section II, “Local Governing Bodies.”

The total valuations are given for counties, boroughs, and town districts. The particulars for component parts of counties, being road districts and portions of outlying country, will be found in the Statistical Volume for 1910.

* Including in the term “boroughs” those town districts which, under the provisions of the Town Districts Act of 1903, are deemed not to form part of any county.

COUNTIES, 1891 AND 1911.

TABLE showing the CAPITAL VALUE of LAND, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND), in each COUNTY in NEW ZEALAND according to the Results of the General Valuation made in 1891, and as at 31st March, 1911.

County.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 1891.	As at 31st March, 1911.	As in Year 1891.	As at 31st March, 1911.
	£	£	£	£
Mangonui	196,158	435,287	152,151	257,403
Whangaroa	68,825	86,111	41,379	52,179
Bay of Islands	365,069	603,338	247,612	406,528
Hokianga	422,365	978,337	365,957	724,631
Whangarei	523,420	1,176,396 ⁽¹⁾	316,003	661,730 ⁽¹⁾
Hobson	325,974	759,475 ⁽²⁾	241,880	468,623 ⁽²⁾
Otamatea	258,496	602,367	156,975	357,789
Rodney	293,235	556,057	173,313	260,715
Waitemata	632,012	1,480,269 ⁽³⁾	388,568	925,275 ⁽³⁾
Eden	2,002,677	4,834,090 ⁽⁴⁾	991,380	2,651,748 ⁽⁴⁾
Manukau	1,385,330	4,349,665	664,272	2,691,267
Islands (Great and Little Barrier)	55,284	69,423	42,574	40,942
Waiheke, &c. ..	71,343	99,385	40,211	55,884
Waikato	682,774	1,444,653 ⁽⁵⁾	282,655	889,119 ⁽⁵⁾
Raglan	357,941	1,764,453	280,945	1,114,478
Waipa	464,086	1,680,964 ⁽⁶⁾	197,900	961,993 ⁽⁶⁾
Kawhia	354,269	406,611 ⁽⁷⁾	350,051	285,965 ⁽⁷⁾
Awakino	⁽⁸⁾	643,023	⁽⁸⁾	421,916
Waitomo	⁽⁹⁾	983,773	⁽⁹⁾	733,549
Ohura	⁽¹⁰⁾	477,673	⁽¹⁰⁾	359,160
Coromandel	217,120	283,038	166,483	176,846
Thames	253,013	548,227	168,442	381,923
Ohinemuri	204,704	883,404 ⁽¹¹⁾	164,182	552,491 ⁽¹¹⁾
Tauranga	282,723	681,120	172,078	421,448
Piako	689,384	1,361,862 ⁽¹²⁾	427,889	843,034 ⁽¹²⁾
Matamata	⁽¹³⁾	1,243,126	⁽¹³⁾	753,734
Rotorua	168,371	236,764 ⁽¹⁴⁾	114,289	214,404 ⁽¹⁴⁾
Whakatane	663,785	675,369 ^(14a)	548,221	527,825 ^(14a)
Opotiki	⁽¹⁵⁾	892,727 ⁽¹⁶⁾	⁽¹⁵⁾	657,508 ⁽¹⁶⁾
East Taupo	301,681	467,533	292,106	347,782

(1) Exclusive of Borough of Whangarei and of Hikurangi Town District, which in 1891 formed part of county.

(2) Exclusive of Borough of Dargaville, which in 1891 formed part of county.

(3) Exclusive of Helensville Town District and of Borough of Northcote, which in 1891 formed part of county.

(4) Exclusive of Boroughs of Mount Eden and Mount Albert and of Ellerslie Town District, which in 1891 formed part of county.

(5) Exclusive of Huntly Town District, which in 1891 formed part of county.

(6) Exclusive of Frankton Town District, which in 1891 formed part of county.

(7) Exclusive of Awakino County and part of Waitomo County and part of Ohura County, which in 1891 formed part of county.

(8) Formed part of Kawhia County.

(9) Formed part of Kawhia and Clifton Counties, and exclusive of part Ohura County.

(10) Formed part of Waitomo and Clifton Counties.

(11) Exclusive of Borough of Waihi, which in 1891 formed part of county.

(12) Exclusive of Borough of Te Aroha and part of Matamata County, which in 1891 formed part of county.

(13) Formed part of Piako and West Taupo Counties.

(14) Exclusive of Rotorua Town, which in 1891 formed part of county.

(14a) Exclusive of County of Opotiki, which in 1891 formed part of county.

(15) Formed part of Counties of Whakatane and Waiapu.

(16) Exclusive of Opotiki Town District, which in 1891 formed part of Whakatane County.

COUNTIES: CAPITAL VALUE OF LAND, ETC., 1891 AND 1911—*continued*.

[* No valuation made.]

County.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 1891.	As at 31st March, 1911.	As in Year 1891.	As at 31st March, 1911.
	£	£	£	£
West Taupo	235,997	404,179 ⁽¹⁷⁾	226,406	358,858 ⁽¹⁷⁾
Islands (Mayor and Motiti)	*	5,700	*	3,616
Waipap	472,548	1,915,303 ⁽¹⁸⁾	341,062	1,329,284 ⁽¹⁸⁾
Waikohu	⁽¹⁹⁾	1,676,965	⁽¹⁹⁾	1,064,087
Cook	1,885,856	4,942,193 ⁽²⁰⁾	1,175,712	3,346,252 ⁽²⁰⁾
Wairoa	1,101,072	2,565,249 ⁽²¹⁾	786,032	1,759,603 ⁽²¹⁾
Hawke's Bay	3,673,889	6,350,570 ⁽²²⁾	2,558,583	4,919,331 ⁽²²⁾
Waipukurau	⁽²³⁾	475,630	⁽²³⁾	367,649
Waipawa	2,178,812	2,209,558 ⁽²⁴⁾	1,249,695	1,566,955 ⁽²⁴⁾
Woodville	⁽²⁵⁾	1,071,703	⁽²⁵⁾	698,497
Dannevirke	⁽²⁶⁾	2,026,419	⁽²⁶⁾	1,853,195
Patangata	1,863,936	3,346,473 ⁽²⁷⁾	1,154,909	2,656,206 ⁽²⁷⁾
Weber	⁽²⁸⁾	482,764	⁽²⁸⁾	279,883
Clifton	441,325	994,316 ⁽²⁹⁾	385,252	560,073 ⁽²⁹⁾
Taranaki	969,579	1,998,051 ⁽³⁰⁾	604,091	1,153,710 ⁽³⁰⁾
Egmont	⁽³¹⁾	1,406,457	⁽³¹⁾	837,066
Stratford	560,345	2,034,344 ⁽³²⁾	447,502	1,221,562 ⁽³²⁾
Whangamomona	⁽³³⁾	513,038	⁽³³⁾	292,016
Waimate West	⁽³⁴⁾	1,204,022	⁽³⁴⁾	921,169
Hawera	1,247,436	1,945,696 ⁽³⁵⁾	807,887	1,460,174 ⁽³⁵⁾
Eltham	⁽³⁶⁾	1,524,327	⁽³⁶⁾	1,067,151
Patea	823,675	2,254,709 ⁽³⁷⁾	522,322	1,545,284 ⁽³⁷⁾
Waitotara	731,668	1,562,904 ⁽³⁸⁾	460,842	1,139,899 ⁽³⁸⁾
Wanganui	1,176,106	1,807,551 ⁽³⁹⁾	830,519	1,217,796 ⁽³⁹⁾
Waimarino	⁽⁴⁰⁾	1,077,480	⁽⁴⁰⁾	901,818

(17) Exclusive of parts of Matamata County and part of Kaitieke County and Taumarunui Borough.

(18) Exclusive of part County of Opoitiki.

(19) Formed part of Cook County.

(20) Exclusive of Waikohu County, which in 1891 formed part of county.

(21) Exclusive of Borough of Wairoa, which in 1891 formed part of county.

(22) Exclusive of Taradale Town District and of a portion transferred to Rangitikei County, and of a portion transferred to Napier Borough, and including portion transferred from Borough of Hastings.

(23) Formed part of Waipawa County.

(24) Exclusive of County of Woodville, Borough of Dannevirke, Dannevirke County, Borough of Waipawa, Waipukurau County, and Waipukurau Town District, which in 1891 formed part of Waipawa County.

(25) Formed part of Waipawa County.

(26) Formed part of Waipawa County.

(27) Exclusive of Weber County, which in 1891 formed part of Patangata County.

(28) Formed part of Patangata County.

(29) Exclusive of portions of Ohura and Waitomo Counties and portions of Waitara Borough which in 1891 formed parts of Taranaki County.

(30) Exclusive of Fitzroy Town District, Inglewood Borough, portions of Waitara Borough and Egmont County, which in 1891 formed parts of Taranaki County.

(31) Formed part of the Counties of Taranaki and Hawera.

(32) Exclusive of Stratford Borough and of Whangamomona County, which in 1891 formed parts of Stratford County.

(33) Formed part of Stratford County.

(34) Formed part of Hawera County.

(35) Exclusive of the Eltham Borough, and of Eltham County, Waimate West County, and a portion of Egmont County, which in 1891 formed parts of Hawera County.

(36) Formed part of Hawera County.

(37) Exclusive of Waverley Town District, which in 1891 formed part of county.

(38) Exclusive of Gonville and Castlecliff Town Districts, and a portion transferred to Wanganui Borough, which in 1891 formed part of county.

(39) Exclusive of Waimarino County and Wanganui East Borough, and portion transferred to Wanganui Borough, which in 1891 formed part of county.

(40) Formed part of Wanganui County, and exclusive of Ohakune Town District.

COUNTIES: CAPITAL VALUE OF LAND, ETC., 1891 AND 1911—*continued.*
 [* No valuation made.]

County.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 1891.	As at 31st March, 1911.	As in Year 1891.	As at 31st March, 1911.
	£	£	£	£
Kaitieke	(40a)	455,615	(40a)	419,383
Rangitikei	1,475,473	4,364,149 ⁽⁴¹⁾	870,091	2,960,446 ⁽⁴¹⁾
Kiwaita	(42)	2,008,687	(42)	1,347,703
Pohangina	(42)	1,220,947	(42)	810,363
Kairanga	(42)	2,146,165	(42)	1,605,404
Oroua	2,268,854	2,005,156 ⁽⁴³⁾	1,298,417	1,475,311 ⁽⁴³⁾
Manawatu	810,171	1,886,509 ⁽⁴⁴⁾	445,416	1,371,234 ⁽⁴⁴⁾
Horowhenua	858,648	2,824,286 ⁽⁴⁵⁾	551,248	1,960,880 ⁽⁴⁵⁾
Islands (Kapiti, Mana, and Somes)	*	17,984	*	13,378
Chatham Islands	*	95,557	*	55,838
Pahiatua	511,400	1,725,427 ⁽⁴⁶⁾	331,634	1,033,798 ⁽⁴⁶⁾
Akitio	(47)1,831,209	756,601	(47)1,057,393	439,524
Castlepoint		589,480		373,171
Eketahuna		(48)706,752		417,233 ⁽⁴⁸⁾
Mauriceville		439,919		252,252
Masterton	1,872,035	3,347,130	1,104,064	2,163,246
Wairarapa South		1,536,351 ⁽⁴⁹⁾		1,014,758 ⁽⁴⁹⁾
Featherston	(50)	2,432,142 ⁽⁵¹⁾	(50)	1,763,577 ⁽⁵¹⁾
Hutt	1,030,745	1,762,005 ⁽⁵²⁾	520,005	1,202,130 ⁽⁵²⁾
Makara	(53)	913,568	(53)	476,464
Collingwood	323,910	243,757 ⁽⁵⁴⁾	223,376	143,305 ⁽⁵⁴⁾
Takaka	(55)	412,798	(55)	190,657
Waimea	1,196,226	2,079,509 ⁽⁵⁶⁾	740,668	1,236,779 ⁽⁵⁶⁾
Sounds	171,095	591,337	124,480	368,104
Marlborough	1,837,632	3,759,811	1,344,120	2,869,307
Kaikoura	350,521	965,982	209,082	709,385
Buller	651,129	971,457	483,407	634,915
Murchison	(57)	536,392	(57)	399,789
Inangahua	874,948	467,307 ⁽⁵⁸⁾	598,963	265,608 ⁽⁵⁸⁾
Grey	861,890	859,936	670,528	599,046
Westland	1,048,156	944,497	964,461	731,232
Cheviot	486,765	936,536	413,852	747,809
Amuri	921,221	1,796,714 ⁽⁵⁹⁾	762,518	1,444,915 ⁽⁵⁹⁾

(40a) Formed part of Waimarino and West Taupo Counties.

(41) Exclusive of Hunterville and Mangaweka Town Districts and Taihape Borough, and including part transferred from Hawke's Bay County.

(42) Formed part of Oroua County.

(43) Exclusive of Counties of Kiwaita, Pohangina, and Kairanga, which in 1891 formed parts of Oroua County.

(44) Including a portion transferred from Foxton Borough.

(45) Exclusive of Levin Borough, which in 1891 formed part of county.

(46) Exclusive of Pahiatua Borough, which in 1891 formed part of county.

(47) Late Wairarapa North County.

(48) Exclusive of Eketahuna Borough, which in 1891 formed part of county.

(49) Exclusive of Featherston County, which in 1891 formed part of Wairarapa South County.

(50) Formed part of Wairarapa South County.

(51) Exclusive of Featherston and Martinborough Town Districts, which in 1891 formed part of Wairarapa South County.

(52) Exclusive of the Boroughs of Miramar and Eastbourne, and of the Town Districts of Johnsonville and Upper Hutt, and of Makara County.

(53) Formed part of Hutt County.

(54) Exclusive of County of Takaka, which in 1891 formed part of Collingwood County.

(55) Formed part of Collingwood County.

(56) Exclusive of Motueka Borough, which in 1891 formed part of county.

(57) Formed part of Inangahua County.

(58) Exclusive of Murchison County, which in 1891 formed part of county.

COUNTIES: CAPITAL VALUE OF LAND, ETC., 1891 AND 1911—*continued*.

[*No valuation made.]

County.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 1891.	As at 31st March, 1911.	As in Year 1891.	As at 31st March, 1911.
Waipara.. ..	£ (⁵⁹)	£ 2,509,496	£ (⁵⁹)	£ 2,178,011
Ashley	3,801,341	3,886,157(⁶⁰)	2,861,083	3,033,745(⁶⁰)
Waimairi	(⁶¹)	3,233,219	(⁶¹)	1,939,243
Paparua	(⁶¹)	1,346,596	(⁶¹)	961,478
Malvern	(⁶¹)	1,868,545	(⁶¹)	1,437,299
Tawera	(⁶¹)	342,165	(⁶¹)	267,842
Heathcote	(⁶¹)	829,478	(⁶¹)	477,051
Halswell	(⁶¹)	748,750	(⁶¹)	543,651
Selwyn	7,446,756	1,149,259(⁶²)	4,897,419	950,370(⁶²)
Springs	(⁶¹)	758,278	(⁶¹)	573,144
Ellesmere	(⁶¹)	2,220,559	(⁶¹)	1,847,985
Mount Herbert	(⁶³)	385,745	(⁶³)	309,117
Akaroa	1,169,379	1,586,704(⁶⁴)	775,316	1,266,648(⁶⁴)
Wairewa	(⁶³)	801,223	(⁶³)	665,065
Ashburton	3,630,383	6,947,349(⁶⁵)	2,691,466	5,656,462(⁶⁵)
Geraldine	3,257,696	2,903,837(⁶⁶)	2,316,183	2,358,732(⁶⁶)
Levels	(⁶⁷)	2,258,526(⁶⁸)	(⁶⁷)	1,787,848(⁶⁸)
Mackenzie	736,021	1,034,289	589,528	796,724
Waimate	2,462,433	3,812,924	1,968,587	3,134,710
Waitaki	2,709,379	3,858,601	2,060,640	3,041,407
Maniototo	449,650	749,950	358,342	512,939
Waihemo	417,887	568,182	277,792	410,186
Waikouaiti	602,015	849,057	309,077	497,056
Peninsula	414,146	505,719(⁶⁹)	193,301	304,091(⁶⁹)
Taieri	1,330,718	1,647,814(⁷⁰)	931,554	1,183,772(⁷⁰)
Tuapeka	938,701	1,457,718	642,394	1,037,691
Bruce	957,438	1,311,260	600,771	948,862
Clutha	1,151,046	1,645,841	772,352	1,095,994
Vincent	791,595	629,051	637,287	415,359
Islands (Quarantine and Goat)	*	3,454	*	900
Lake	382,722	397,889	274,791	286,797
Fiord	*	144,398	*	137,618
Wallace	1,364,016	2,390,443(⁷¹)	943,777	1,679,063(⁷¹)
Southland	3,739,513	7,777,483(⁷²)	2,446,830	5,388,604(⁷²)
Stewart Island	85,021	167,954	79,690	135,287
Islands (Antipodes, &c.)..	*	13,880	*	13,880

(⁵⁹) Formed part of Ashley County.(⁶⁰) Exclusive of Waipara County, which in 1891 formed part of county.(⁶¹) Formed part of Selwyn County.(⁶²) Exclusive of Waimairi, Paparua, Malvern, Tawera, Heathcote, Halswell, Springs, and Ellesmere Counties, and Spreydon Borough, which in 1891 formed part of county.(⁶³) Formed part of Akaroa County.(⁶⁴) Exclusive of Mount Herbert and Wairewa Counties, which in 1891 formed part of county.(⁶⁵) Exclusive of Hampstead and Tinwald Town Districts, which in 1891 formed part of county.(⁶⁶) Exclusive of Levels County and Temuka and Geraldine Boroughs and Pleasant Point Town District.(⁶⁷) Formed part of Geraldine County.(⁶⁸) Exclusive of part transferred to Borough of Timaru.(⁶⁹) Exclusive of Bay Town District, which in 1891 formed part of county.(⁷⁰) Exclusive of portion of Green Island Borough, which in 1891 formed part of county, and inclusive of a portion of Borough of Roslyn transferred to county.(⁷¹) Exclusive of Otatau Town District, which in 1891 formed part of county.(⁷²) Exclusive of Borough of Mataura, Wyndham Town District, and a portion of Avenal Borough, which in 1891 formed parts of Southland County.

BOROUGHs, 1891 AND 1911.

TABLE showing the CAPITAL VALUE of LAND, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE OF LAND), in each BOROUGH in NEW ZEALAND according to the Results of the General Valuation made in 1891, and as at 31st March, 1911.

Borough.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 1891.	As at 31st March, 1911.	As in Year 1891.	As at 31st March, 1911.
	£	£	£	£
Whangarei	(1)	531,610	(1)	330,457
Dargaville	(2)	219,293	(2)	130,842
Birkenhead	77,532	304,896	42,333	133,746
Devonport	407,333	1,413,850	163,468	645,813
Auckland	4,934,288	10,674,543	2,471,496	5,682,715
Parnell	366,098	1,062,818	138,775	525,965
Newmarket	182,353	417,090	82,327	205,918
Grey Lynn	222,355	1,056,119	135,607	501,789
Onehunga	250,634	673,581	111,406	316,793
Northcote	(3)	170,656	(3)	75,682
Mount Albert	(4)	1,022,970	(4)	484,097
Mount Eden	(4)	1,632,972	(4)	731,957
Hamilton	90,142	794,223	44,584	459,168
Cambridge	70,279	219,960	25,521	111,863
Te Kuiti	(5)	227,714	(5)	122,872
Thames	227,171	276,732	76,547	96,851
Tauranga	63,026	105,905	25,153	46,935
Waihi	(6)	421,047	(6)	151,662
Te Aroha	(7)	88,127	(7)	34,739
Taumarunui	(8)	130,091	(8)	68,255
Gisborne	317,989	1,887,432	148,511	1,126,722
Wairoa	(9)	239,596	(9)	149,098
Napier	1,275,853	1,799,360	667,157	826,407
Hastings	372,458	1,523,919 ⁽¹⁰⁾	230,592	921,609 ⁽¹⁰⁾
Dannevirke	(11)	727,703	(11)	381,311
Woodville	102,226	116,736	57,852	45,978
Waipawa	(12)	220,983	(12)	135,992
New Plymouth	341,117	1,225,875	165,621	726,107
Hawera	84,834	487,324	37,914	232,958
Patea	43,378	64,662	12,005	22,042
Waitara	(13)	195,854	(13)	90,089
Inglewood	(14)	158,209	(14)	67,434
Stratford	(15)	365,229	(15)	189,513
Eltham	(16)	302,308	(16)	167,498
Wanganui	543,403	2,738,276 ⁽¹⁷⁾	290,321	1,686,902 ⁽¹⁷⁾
Marton	83,915	147,558	33,736	63,135
Wanganui East	(18)	288,727	(18)	212,002
Taihape	(19)	209,924	(19)	106,799

(1) Formed part of Whangarei County.

(2) Formed part of Hobson County.

(3) Formed part of Waitemata County.

(4) Formed part of Eden County.

(5) Formed part of Waitomo County.

(6) Formed part of Ohinemuri County.

(7) Formed part of Piako County.

(8) Formerly Taumarunui Native Township, being part of West Taupo County.

(9) Formerly Clyde Town District, and part transferred from Wairoa County.

(10) Part transferred to Hawke's Bay County.

(11) Formed part of Waipawa County.

(12) Formed part of Waipawa County.

(13) Formed part of Clifton County.

(14) Formed part of Taranaki County.

(15) Formed part of Stratford County.

(16) Formed part of Hawera County.

(17) Part transferred from Waitotara County.

(18) Formed part of Wanganui County.

(19) Formed part of Rangitikei County.

BOROUGHS: CAPITAL VALUE OF LAND, ETC., 1891 AND 1911—*continued*.

Borough.	Capital Value, Land and Improvements.		Unimproved value of Land (included in previous columns).	
	As in Year. 1891.	As at 31st March, 1911.	As in Year 1891.	As at 31st March, 1911.
	£	£	£	£
Feilding	146,881	857,678	68,119	504,080
Palmerston North	489,618	2,163,636	310,293	1,137,401
Foxton	85,743	237,125 ⁽²⁰⁾	39,755	114,152 ⁽²⁰⁾
Onslow	114,053	534,099 ⁽²¹⁾	78,803	297,779 ⁽²¹⁾
Karori	118,728	555,962 ⁽²¹⁾	74,595	378,356 ⁽²¹⁾
Wellington—				
Onslow portion	..	237,242	..	131,748
Karori portion	..	496,828	..	151,360
City portion	5,865,778	16,333,£80	3,440,182	9,592,414
Melrose portion	203,517	2,746,666	129,429	1,333,390
Levin	⁽²¹⁾	282,842	⁽²²⁾	128,392
Pahiatua	⁽²²⁾	222,541	⁽²³⁾	101,223
Masterton	356,860	1,181,072	159,861	572,454
Carterton	88,650	271,634	31,315	118,680
Greytown	115,649	199,421	34,095	84,310
Lower Hutt	244,075	1,429,971	159,178	889,678
Petone	268,358	1,340,951	145,221	691,403
Eketabuna	⁽²⁴⁾	163,276	⁽²⁴⁾	83,667
Eastbourne	⁽²⁵⁾	177,952	⁽²⁵⁾	107,173
Miramar	⁽²⁶⁾	872,633	⁽²⁶⁾	661,629
Richmond	84,285	132,740	43,375	76,050
Nelson	942,370	1,185,202	389,397	574,746
Picton	88,195	270,613	41,189	153,621
Blenheim	378,943	704,897	167,481	339,370
Motueka	⁽²⁷⁾	171,399	⁽²⁷⁾	89,048
Westport	166,987	714,289	57,782	382,835
Greymouth	299,077	782,916	114,543	269,386
Brunner	115,892	70,582	16,166	11,591
Kumara	33,565	34,252	6,945	5,806
Hokitika	102,708	230,138	18,054	80,415
Ross	16,961	22,990	5,250	5,722
Rangiora	158,017	240,579	71,161	86,736
Kaipoi	134,055	185,025	47,023	59,260
Christchurch—				
Central Ward	3,403,566	6,525,496	1,820,770	3,106,093
St. Albans Ward	542,822	1,758,844	284,938	642,934
Sydenham Ward	821,060	1,718,061 ⁽²⁸⁾	333,876	592,263 ⁽²⁸⁾
Linwood Ward	⁽²⁹⁾	1,137,558	⁽²⁹⁾	364,257
Woolston	⁽²⁹⁾	429,151	⁽²⁹⁾	172,596
New Brighton	⁽²⁹⁾	214,293	⁽²⁹⁾	93,461
Sumner	102,145	362,850	60,264	210,540
Lyttelton	851,730	938,892	150,490	265,210
Akaroa	49,407	102,076	19,628	44,554
Spreydon	⁽³⁰⁾	428,770	⁽³⁰⁾	178,576
Ashburton	223,091	457,193	90,733	201,925
Timaru	442,830	2,142,753	151,661	1,120,531

⁽²⁰⁾ Part transferred to Manawatu County.⁽²¹⁾ Part transferred to Wellington City.⁽²²⁾ Formed part of Horowhenua County.⁽²³⁾ Formed part of Pahiatua County.⁽²⁴⁾ Formed part of Eketabuna County.⁽²⁵⁾ Formed part of Hutt County.⁽²⁶⁾ Formed part of Hutt County.⁽²⁷⁾ Formed part of Waimaea County.⁽²⁸⁾ Value of railway-station (£80,000) included in 1891.⁽²⁹⁾ Formed part of Selwyn County.⁽³⁰⁾ Formed part of Selwyn County.

BOROUGHES: CAPITAL VALUE OF LAND, ETC., 1891 AND 1911—*continued.*

Borough.	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns.	
	As in Year 1891.	As at 31st March, 1911.	As in Year 1891.	As at 31st March, 1911.
	£	£	£	£
Geraldine	(³¹) 109,772		(³¹) 35,284	
Temuka	(³²) 203,684		(³²) 65,612	
Waimate	75,399	271,489	18,759	97,935
Oamaru	612,571	816,013	279,113	290,461
Hampden	13,195	26,179	5,229	9,682
Naseby	24,186	33,183	2,440	4,765
Palmerston	51,182	82,234	16,771	23,170
Waikouaiti(³³)	45,716	85,771	19,823	39,382
Port Chalmers	200,043	320,835	60,946	104,990
West Harbour	137,015	191,225	68,240	75,743
Maori Hill	142,890	389,412	67,348	164,925
Roslyn	360,962	905,527(³⁴)	169,610	344,556(³⁴)
Mornington	284,875	539,274	125,414	184,666
Dunedin (City)(³⁵)—				
North-east Valley Ward..	276,835		130,271	
Leith Ward				
Bell Ward				
High Ward				
South Ward	4,193,422	8,833,939	2,124,467	3,856,501
Caversham Ward	466,074		217,158	
South Dunedin Ward ..	223,534		82,609	
St. Kilda	118,477	575,651	76,842	171,641
Green Island	36,962	207,352(³⁶)	13,585	60,245(³⁶)
Mosgiel	122,625	209,277	53,441	78,424
Roxburgh	20,123	33,963	3,167	5,109
Lawrence	79,066	115,978	18,584	31,408
Tapanui	16,155	31,550	2,575	9,065
Milton	76,207	171,230	14,012	53,861
Balclutha	53,210	176,583	14,547	80,573
Kaitangata	54,976	103,359	21,133	31,325
Cromwell	22,168	45,500	4,658	10,870
Alexandra	13,578	52,454	2,955	9,973
Arrowtown	24,586	20,909	5,012	3,325
Queenstown	65,153	64,915	13,524	14,544
Gore	142,708	564,357	66,171	246,701
Mataura	(³⁷) 151,524		(³⁷) 48,495	
Winton	20,195	78,659	7,965	27,935
Gladstone*	26,541		13,825	
Avenal*	15,269		6,687	
North Invercargill* ..	28,293	2,720,648(³⁸)	15,640	1,268,101(³⁸)
East Invercargill* ..	42,996		18,385	
Invercargill*	959,140		517,879	
South Invercargill ..	79,526	130,048(³⁹)	42,813	72,991(³⁹)
Riverton	59,626	72,925	22,024	17,941
Campbelltown	97,380	252,827	49,430	96,622

* Amalgamated 10th January, 1910.

⁽³¹⁾ Formed part of Geraldine County.⁽³²⁾ Formed part of Geraldine County.⁽³³⁾ Formerly Hawksbury Borough.⁽³⁴⁾ Part transferred to Taieri County.⁽³⁵⁾ Now includes North-east Valley Borough and Caversham and South Dunedin Wards of Dunedin City.⁽³⁶⁾ Part transferred from Taieri County.⁽³⁷⁾ Formed part of Southland County.⁽³⁸⁾ Part transferred from South Invercargill Borough.⁽³⁹⁾ Part transferred to Invercargill Borough.

TOWN DISTRICTS, 1891 AND 1911.

TABLE showing the CAPITAL VALUE of LAND, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND), according to the Results of the General Valuation made in 1891, and as at 31st March, 1911, for those Town Districts which, under the Provisions of the Town Districts Act, 1908, do not form Part of any County.

Town District. (Outside County Jurisdiction.)	Capital Value, Land and Improvements.		Unimproved Value of Land (included in previous columns).	
	As in Year 891.	As at 31st March, 1911.	As in Year 1891.	As at 31st March, 1911.
	£	£	£	£
Hikurangi	(1)	41,031	(1)	19,301
Helensville	40,639	88,685	8,028	34,390
Huntly	(2)	154,145	(2)	90,765
Ellerslie	(3)	194,908	(3)	102,615
Frankton	(4)	212,583	(4)	127,573
Rotorua*	(5)	709,865	(5)	462,067
Opotiki	35,655	142,548	14,390	90,831
Taradale	82,711	136,121	50,575	88,485
Waipukurau	(6)	201,994	(6)	135,088
Fitzroy	(7)	130,385	(7)	72,286
Gonville	(8)	295,166	(8)	169,870
Castlecliff	(9)	78,652	(9)	33,828
Ohakune	(10)	47,639	(10)	32,196
Waverley	(11)	65,813	(11)	22,501
Hunterville	(12)	79,461	(12)	33,600
Mangaweka	(13)	49,562	(13)	19,450
Martinborough	(14)	112,308	(14)	36,757
Featherston	47,187	96,369	13,648	32,329
Johnsonville	46,313	246,596	21,519	155,138
Upper Hutt	(15)	217,872	(15)	142,863
Hampstead	60,563	147,679	27,784	65,875
Tinwald	49,428	81,420	25,191	45,217
Pleasant Point	(16)	56,407	(16)	24,504
Bay	(17)	247,969	(17)	132,466
Otautau	14,340	80,825	6,015	29,693
Wynndham	22,763	59,594	7,544	17,166

* Constituted under the Rotorua Town Act, 1907.

(1) Formed part of Hikurangi Road District.

(2) Formed part of Huntly Road District.

(3) Formed part of Mount Wellington Road District.

(4) Formed part of Waipa County.

(5) Formed part of Rotorua County.

(6) Formed part of Waipukurau Road District.

(7) Formed part of Henui Road District.

(8) Formed part of Westmere Riding.

(9) Formed part of Waitotara County.

(10) Formed part of Waimarino County.

(11) Formed part of Patea County.

(12) Formed part of Rangitikei County.

(13) Formed part of Rangitikei County.

(14) Formed part of Featherston County.

(15) Formed part of Hutt County.

(16) Formed part of Levels County.

(17) Formed part of Tomahawk Road District.

COUNTIES, 1911.

TABLE showing—(1.) CAPITAL VALUE of LAND, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND), in each COUNTY in New Zealand. (2.) CAPITAL VALUE of RATEABLE PROPERTY, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND), in each COUNTY, as at 31st March, 1911.

NOTE.—The rateable value of pastoral lands of the Crown is fixed, under section 2 of the Rating Act, 1908, at the annual rental capitalized at 6 per cent., and in some cases is more and in some cases less than the assessed capital value of same. The rateable values which are shown below include, in some cases, Native lands which are liable for half-rates only.

[System of rating: C.V. signifies capital value, and U.V. unimproved value.]

County.	Gross Values.		System of Rating.	Rateable Values.	
	Capital Value (Land and Improve- ments).	Unimproved Value of Land (in- cluded in previous column).		Capital Value (Land and Improve- ments).	Unimproved Value of Land (in- cluded in previous column).
	£	£		£	£
Mangonui	435,287	257,403	C.V.	347,082	184,662
Whangaroa	86,111	52,179	"	75,514	45,201
Bay of Islands	603,338	406,523	"	431,120	250,597
Hokianga	978,337	724,631	U.V.	682,906	443,229
Whangarei	1,176,396	661,730	C.V.	1,093,206	596,554
Hobson	759,475	468,623	U.V.	697,953	420,249
Otamatea	602,367	357,789	C.V.	560,481	325,796
Rodney	556,057	260,715	"	532,969	245,697
Waitemata	1,480,269	925,275	"	1,417,840	884,736
Eden	4,831,090	2,651,748	"	4,570,925	2,549,552
Manukau	4,349,665	2,691,267	"	4,211,739	2,616,200
Islands—					
Great and Little Barrier	169,808	96,826	..	128,727	79,526
Waiheke, &c.					
Waikato	1,444,653	889,119	C.V.	1,349,237	822,997
Raglan	1,764,453	1,114,478	U.V.	1,700,030	1,058,950
Waipa	1,680,964	961,993	C.V.	1,615,764	937,752
Kawhia	406,611	285,965	U.V.	385,245	266,829
Awakino	643,023	421,916	"	591,397	371,330
Waitomo	983,773	733,549	C.V.	842,319	599,050
Ohura	477,673	359,160	U.V.	378,848	262,180
Coromandel	283,038	176,846	C.V.	225,022	134,126
Thames	548,227	381,923	"	461,285	311,629
Ohinemuri	883,404	552,491	"	680,510	383,292
Tauranga	681,120	421,448	U.V.	621,250	373,017
Piako	1,361,862	843,034	"	1,297,263	788,468
Matamata	1,243,126	753,734	C.V.	1,118,319	639,134
Rotorua	236,764	214,404	Nil	89,144	70,227
Whakatane	675,369	527,825	C.V.	481,192	348,633
Opotiki	892,687	657,508	"	584,211	368,672
East Taupo	467,533	347,782	Nil	296,778	179,407
West Taupo	404,179	358,858	"	206,557	164,793
Islands (Mayor and Motiti)	5,700	3,616	"	2,262	1,018
Waiaapu	1,915,303	1,329,234	C.V.	1,742,691	1,182,070
Waikohu	1,676,965	1,064,087	"	1,648,156	1,037,946
Cook	4,942,193	3,346,252	"	4,907,010	3,325,932
Wairoa	2,565,249	1,759,603	"	2,435,280	1,646,190
Hawke's Bay	6,350,570	4,919,331	"	6,294,589	4,896,948

* Counties Act not wholly in force.

COUNTIES: CAPITAL VALUE of LAND, &c.—*continued.*

County.	Gross Values.		System of Rating.	Rateable Values.	
	Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).		Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).
	£	£		£	£
Waipukurau	475,630	367,649	U.V.	473,513	366,607
Waipawa	2,209,558	1,566,955	"	2,180,471	1,543,818
Woodville	1,071,703	698,497	"	1,062,239	692,357
Dannevirke	2,026,419	1,353,195	"	1,888,966	1,328,667
Patangata	3,346,473	2,656,206	C.V.	3,339,569	2,654,330
Weber	482,764	279,883	"	479,667	278,555
Clifton	994,316	560,073	"	956,232	526,440
Taranaki	1,998,051	1,153,710	"	1,956,208	1,124,539
Egmont	1,406,457	837,066	"	1,363,773	809,080
Stratford	2,034,344	1,221,562	U.V.	2,042,517	1,187,347
Whangamomona	513,038	292,016	"	484,151	267,211
Waimate West	1,204,022	921,169	C.V.	1,194,210	918,622
Hawera	1,945,696	1,460,174	"	1,918,890	1,442,337
Eltham	1,524,327	1,067,151	"	1,503,803	1,053,115
Patea	2,254,709	1,545,284	"	2,173,471	1,486,545
Waitotara	1,562,904	1,139,899	"	1,533,178	1,113,932
Wanganui	1,807,551	1,217,796	"	1,763,337	1,181,856
Waimarino	1,077,480	901,818	U.V.	799,687	641,645
Kaitieke	455,615	419,383	"	269,524	237,678
Rangitikei	4,364,149	2,960,446	C.V.	4,307,938	2,922,366
Kiwitea	2,008,687	1,347,703	"	1,980,084	1,327,906
Pohangina	1,220,947	810,363	"	1,179,511	774,227
Kairanga	2,146,165	1,605,404	U.V.	2,109,168	1,590,550
Oroua	2,005,156	1,475,311	C.V.	1,993,295	1,471,821
Manawatu	1,886,509	1,371,234	"	1,870,554	1,365,721
Horowhenua	2,824,286	1,960,880	"	2,547,277	1,902,227
Islands (Kapiti, Mana, and Some)	17,984	13,378	Nil	10,484	9,378
Chatham Islands	95,557	55,838	"	92,446	53,614
Pahiatua	1,725,427	1,033,798	U.V.	1,695,571	977,471
Akitio	756,601	439,524	"	737,488	424,093
Castlepoint	589,480	373,171	C.V.	585,899	372,540
Eketahuna	706,752	417,233	"	693,007	407,711
Mauriceville	439,919	252,252	"	420,055	235,362
Masterton	3,347,130	2,163,246	"	3,302,972	2,132,026
Wairarapa South	1,536,351	1,014,758	U.V.	1,506,467	993,622
Featherston	2,432,142	1,763,577	C.V.	2,355,873	1,695,049
Hutt	1,762,005	1,202,130	"	1,591,723	1,112,288
Makara	913,568	476,464	"	769,084	446,955
Collingwood	243,757	143,305	"	199,483	106,805
Takaka	412,798	190,657	U.V.	363,295	146,258
Waimea	2,079,509	1,236,779	C.V.	1,938,153	1,134,582
Sounds	591,337	368,104	Nil	565,751	343,123
Marlborough	3,759,811	2,869,307	*	3,635,436	2,767,209
Kaikoura	965,982	709,385	C.V.	948,456	708,735
Buller	971,457	634,915	U.V.	546,820	288,228

* Counties Act not wholly in force.

COUNTIES: CAPITAL VALUE OF LAND, &c.—*continued.*

County.	Gross Values.		System of Rating.	Rateable Values.	
	Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).		Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).
	£	£		£	£
Murchison	536,392	399,789	U.V.	216,711	87,529
Inangahua	467,307	265,608	"	273,316	91,496
Grey	859,936	599,046	C.V.	450,245	211,274
Westland	944,497	731,232	"	419,918	227,970
Cheviot	936,536	747,809	U.V.	924,808	743,639
Amuri	1,796,714	1,444,915	C.V.	1,757,865	1,420,689
Waipara	2,509,496	2,178,011	"	2,500,330	2,176,728
Ashley	3,886,157	3,033,745	"	3,804,588	2,983,000
Waimairi	3,233,219	1,939,243	C.V.	2,925,626	1,661,551
Paparu	1,346,596	961,478	"	1,304,275	937,938
Malvern	1,868,545	1,437,299	"	1,832,031	1,430,546
Tawera	342,165	267,842	"	328,861	263,865
Heathcote	829,478	477,051	"	800,183	470,391
Halswell	748,750	543,651	"	721,534	536,699
Selwyn	1,149,259	950,370	"	1,141,898	945,214
Springs	758,278	573,144	"	721,377	571,901
Ellesmere	2,220,559	1,847,985	"	2,194,673	1,813,043
Mount Herbert	385,745	309,117	"	378,715	306,902
Wairewa	801,223	665,065	"	791,453	657,565
Akaroa	1,586,704	1,266,648	"	1,573,287	1,262,356
Ashburton	6,947,349	5,656,462	"	6,883,563	5,626,137
Geraldine	2,903,837	2,358,732	"	2,873,915	2,342,328
Levels	2,258,526	1,787,848	"	2,244,582	1,784,564
Mackenzie	1,034,289	796,724	"	1,013,149	789,128
Waimate	3,812,924	3,134,710	U.V.	3,788,875	3,128,556
Waitaki	3,858,601	3,041,407	C.V.	3,798,291	3,020,905
Maniototo	749,950	512,939	"	720,073	499,234
Waihemo	568,182	410,186	"	563,426	409,211
Waikouaiti	849,057	497,056	"	737,589	484,814
Peninsula	505,719	304,091	"	476,801	299,152
Taieri	1,647,814	1,183,772	C.V.	1,615,152	1,173,479
Tuapeka	1,457,718	1,037,691	"	1,415,978	1,016,963
Bruce	1,311,260	948,862	"	1,292,487	942,972
Clutha	1,645,841	1,095,994	"	1,573,446	1,054,531
Vincent	629,051	415,359	"	595,778	398,100
Quarantine and Goat Islands	3,454	900	Nil	..	..
Lake	397,889	286,797	C.V.	357,953	256,085
Fiord	144,398	137,618	Nil	16,506	15,276
Wallace	2,390,443	1,679,063	C.V.	2,229,641	1,540,703
Southland	7,777,483	5,388,604	U.V.	7,597,977	5,265,580
Stewart Island	167,954	135,287	C.V.	40,855	22,454
Islands (Antipodes, &c.) ..	13,880	13,880	Nil	12,000	12,000
Totals	185,042,337	129,990,593	..	174,994,248	122,259,600

* Counties Act not wholly in force.

BOROUGHES, 1911.

TABLE showing—(1.) CAPITAL VALUE OF LAND, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND). (2.) CAPITAL VALUE of RATEABLE PROPERTY, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND), in each BOROUGH in NEW ZEALAND, as at 31st March, 1911.

[System of rating: C.V. signifies capital value, U.V. unimproved value, and A.V. annual value.]

Boroughs.	Gross Values.		System of Rating.	Rateable Values.	
	Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).		Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).
	£	£		£	£
Whangarei	531,610	330,457	C.V.	507,535	315,037
Dargaville	219,293	130,842	U.V.	213,413	128,262
Birkenhead	304,896	133,746	A.V.	296,988	129,651
Devonport	1,413,850	645,813	U.V.	1,112,992	511,097
Auckland	10,674,543	5,682,715	A.V.	9,516,808	5,030,380
Parnell	1,062,818	525,965	"	953,608	469,990
Newmarket	417,090	205,918	"	402,258	196,373
Grey Lynn	1,056,119	501,789	U.V.	1,021,574	482,579
Onehunga	673,581	316,793	A.V.	627,399	291,153
Northcote	170,656	75,682	"	165,546	72,492
Mount Albert	1,022,970	484,097	C.V.	998,685	473,442
Mount Eden	1,632,972	731,957	A.V.	1,526,610	699,837
Hamilton	794,223	459,168	U.V.	704,933	395,348
Cambridge	219,960	111,863	A.V.	193,355	97,305
Te Kuiti	227,714	122,872	C.V.	215,600	116,569
Thames	276,732	96,851	A.V.	233,535	88,149
Tauranga	105,905	46,935	"	96,455	42,869
Waihi	421,047	151,662	"	391,869	143,854
Te Aroha	88,127	34,739	"	73,403	28,500
Taumarunui	130,091	68,255	"	119,022	62,771
Gisborne	1,887,432	1,126,722	U.V.	1,794,468	1,074,592
Wairoa	239,596	149,098	"	225,837	141,132
Napier	1,799,360	826,407	A.V.	1,677,156	790,190
Hastings	1,523,919	921,609	U.V.	1,466,364	894,959
Dannevirke	727,703	381,311	"	684,394	361,279
Woodville	116,736	45,978	"	101,660	41,461
Waipawa	220,983	135,992	"	204,664	127,911
New Plymouth	1,225,875	726,107	A.V.	1,099,285	659,689
Hawera	487,324	232,958	U.V.	445,778	207,960
Patea	64,662	22,042	A.V.	56,535	20,077
Waitara	195,854	90,089	C.V.	186,532	86,004
Inglewood	158,209	67,434	"	143,816	59,338
Stratford	365,229	189,513	U.V.	331,144	170,616
Eltham	302,308	167,498	C.V.	285,426	158,396
Wanganui	2,738,276	1,636,902	A.V.	2,565,817	1,559,984
Marton	147,558	63,135	"	133,995	60,260
Wanganui East	288,727	212,002	"	286,355	210,547
Taihape	209,924	106,799	C.V.	176,034	88,230
Feilding	857,678	504,080	U.V.	782,830	451,089
Palmerston North	2,163,636	1,137,401	"	2,043,427	1,074,355
Foxton	237,125	114,152	"	208,415	101,027
Onslow	534,099	297,779	"	485,532	281,963
Karori	555,962	378,356	"	520,515	348,664

BOROUGHs: CAPITAL VALUE of LAND, &c.—continued.

Boroughs.	Gross Values.		System of Rating.	Rateable Values.	
	Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).		Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).
	£	£		£	£
Wellington—					
Onslow portion ..	237,242	131,748	U.V.	233,867	130,473
Karori portion ..	496,838	151,360	"	441,233	212,183
City portion ..	16,333,880	9,592,414	"	14,834,533	8,344,483
Kilbirnie portion ..	2,746,666	1,333,390	"	1,129,283	533,129
Island Bay portion }				637,367	366,350
Ohio portion ..				957,317	409,416
Levin ..	282,842	128,392	C.V.	261,429	120,007
Pahiatua ..	222,541	101,223	U.V.	211,579	97,925
Masterton ..	1,181,072	572,454	"	1,081,830	538,076
Carterton ..	271,634	118,680	C.V.	253,194	112,680
Greytown ..	199,421	84,310	A.V.	187,778	82,971
Lower Hutt ..	1,429,971	889,678	U.V.	1,358,930	833,523
Petone ..	1,840,951	691,403	"	1,206,419	603,058
Eketahuna ..	163,276	83,667	"	152,118	79,376
Eastbourne ..	177,952	107,173	"	174,781	105,307
Miramar ..	872,683	661,629	"	794,625	600,776
Richmond ..	132,740	76,050	C.V.	125,952	73,367
Nelson City ..	1,185,202	574,746	A.V.	1,077,131	533,675
Picton ..	270,613	153,621	U.V.	236,255	129,823
Blenheim ..	704,897	339,370	"	650,812	318,528
Motueka ..	171,399	89,048	C.V.	164,061	87,388
Westport ..	714,289	382,835	U.V.	593,849	304,565
Greymouth ..	782,916	269,386	"	665,587	227,093
Brunner ..	70,582	11,591	A.V.	20,032	8,640
Kumara ..	34,252	5,806	C.V.	24,389	3,771
Hokitika ..	230,138	80,415	U.V.	189,367	64,635
Ross ..	22,990	5,722	C.V.	18,793	4,753
Rangiora ..	240,579	86,736	"	222,762	82,489
Kaipoi ..	185,025	59,260	A.V.	168,025	56,575
Christchurch City—					
Central Ward ..	6,525,496	3,108,093	U.V.	5,989,374	2,951,086
St. Albans Ward ..	1,758,844	642,934	"	1,731,554	633,934
Sydenham Ward ..	1,718,061	592,263	"	1,602,846	519,918
Linwood Ward ..	1,137,558	364,257	"	1,119,390	358,799
Woolston ..	429,151	172,596	"	407,196	166,026
New Brighton ..	214,293	93,461	"	209,598	91,471
Sumner ..	892,850	210,540	"	369,360	199,365
Lyttelton ..	938,892	265,210	A.V.	311,677	92,050
Akaroa ..	102,076	44,554	C.V.	92,426	40,771
Ashburton ..	457,193	201,925	A.V.	415,803	177,850
Timaru ..	2,142,753	1,120,531	"	1,992,243	1,047,166
Geraldine ..	109,772	35,284	C.V.	101,817	33,219
Temuka ..	203,684	65,612	"	174,922	57,022
Waimate ..	271,489	97,935	U.V.	238,544	89,694
Spreydon ..	428,770	178,576	"	420,380	176,311
Oamaru ..	816,013	290,461	A.V.	753,700	274,249

BOROUGHES: CAPITAL VALUE of LAND, &c.—*continued*.

Boroughs.	Gross Values.		System of Rating.	Rateable Values.	
	Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).		Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).
	£	£		£	£
Hampden ..	26,179	9,682	C.V.	21,933	8,132
Naseby ..	33,183	4,765	A.V.	26,983	4,245
Palmerston ..	82,234	23,170	C.V.	73,754	21,459
Waikouaiti ..	85,771	39,382	"	79,859	38,487
Port Chalmers ..	390,835	104,990	A.V.	278,985	97,660
West Harbour ..	191,225	75,743	U.V.	182,885	72,473
Maori Hill ..	389,412	164,925	"	324,707	136,250
Roslyn ..	905,527	344,556	A.V.	887,042	33,954
Mornington ..	539,274	184,666	"	521,224	179,936
Dunedin City—					
North-east Valley Ward	563,622	209,553	"	546,015	202,636
Leith Ward ..	1,520,533	669,610	"	1,417,008	632,840
Bell Ward ..	1,589,048	770,555	"	1,402,948	679,855
High Ward ..	2,766,551	1,306,650	"	2,444,741	1,147,670
South Ward ..	1,003,489	456,565	"	939,239	401,165
Caversham Ward	782,107	276,195	"	729,920	265,375
South Dunedin Ward	608,589	167,373	"	626,929	170,713
St. Kilda ..	575,651	171,641	"	564,091	169,931
Green Island ..	207,352	60,245	"	198,362	58,295
Mosgiel ..	209,277	78,424	"	193,547	74,664
Roxburgh ..	33,963	5,109	"	30,063	4,599
Lawrence ..	115,978	31,408	"	101,183	28,713
Tapanui ..	31,550	9,065	"	28,690	8,595
Milton ..	171,230	53,861	"	158,715	51,296
Balclutha ..	176,583	80,573	U.V.	166,833	76,838
Kaitangata ..	103,359	31,325	A.V.	97,424	30,013
Cromwell ..	45,500	10,870	"	40,289	9,496
Alexandra ..	52,454	9,973	"	48,538	9,435
Arrowtown ..	20,909	3,325	"	15,339	2,867
Queenstown ..	64,915	14,544	"	51,801	12,244
Gore ..	564,357	246,701	U.V.	511,574	219,711
Mataura ..	151,524	48,495	A.V.	144,457	44,499
Winton ..	78,659	27,935	U.V.	69,879	25,669
Invercargill ..	2,720,648	1,268,101	"	2,450,439	1,120,145
South Invercargill	130,048	72,991	"	124,973	71,061
Riverton ..	72,925	17,941	A.V.	62,932	16,682
Campbelltown ..	252,827	96,622	U.V.	235,559	89,662
Totals ..	104,099,136	51,855,351	..	95,081,600	46,936,617

TOWN DISTRICTS.

TABLE showing—(1.) CAPITAL VALUE of LAND, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND). (2.) CAPITAL VALUE of RATEABLE PROPERTY, with IMPROVEMENTS (and distinguishing the UNIMPROVED VALUE of LAND), as at 31st March, 1911, for those Town Districts which, under the provisions of the Town Districts Act, 1908, do not form Part of any County.

Town Districts. (Outside County Jurisdiction.)	Gross Values.		System of Rating.	Rateable Values.	
	Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).		Capital Value (Land and Improvements).	Unimproved Value of Land (included in previous column).
	£	£		£	£
Hikurangi	41,031	19,301	C.V.	38,923	18,823
Helensville	88,685	34,390	"	79,385	31,815
Huntly	154,145	90,765	"	147,895	88,815
Ellerslie	194,903	102,615	"	179,968	94,120
Frankton	212,583	127,573	"	203,013	121,953
Rotorua*	709,865	462,067	"	455,067	272,352
Opotiki	142,548	90,831	C.V.	130,397	83,455
Taradale	136,121	88,485	"	132,431	87,530
Waipukurau	201,994	135,088	U.V.	187,968	129,733
Fitzroy	130,385	72,286	C.V.	129,533	72,021
Gonville	295,166	169,870	"	270,790	157,589
Castlecliff	78,652	33,823	"	73,297	29,633
Ohakune	47,639	32,196	U.V.	39,417	24,789
Waverley	65,813	22,501	C.V.	59,884	20,811
Huntermville	79,461	33,600	"	73,385	31,211
Mangaweka	49,562	19,450	"	43,448	15,900
Martinborough	112,308	36,757	"	107,209	36,042
Featherston	96,369	32,329	"	86,670	30,650
Johnsonville	246,596	155,138	"	228,698	144,915
Upper Hutt	217,872	142,863	"	209,744	139,710
Hampstead	147,679	65,875	"	136,659	65,075
Tinwald	81,420	45,217	"	78,446	44,612
Pleasant Point	56,407	24,504	"	51,228	23,540
Bay	247,969	132,466	"	242,414	130,776
Otautau	80,825	29,693	"	74,354	28,233
Wyndham	59,594	17,166	A.V.	55,842	16,207
Totals	3,975,592	2,216,854	..	3,516,065	1,940,310

* Constituted under the Rotorua Town Act, 1907.

SECTION XXII.—ACCUMULATION, PRICES, AND WAGES.

BANKS OF ISSUE.

EACH bank doing business in New Zealand has its private Act, the provisions of which govern the issue of notes by each respective bank, except the Bank of Australasia, whose Royal Charter is equivalent to an Act of the New Zealand Parliament. The deeds of settlement of the Bank of New Zealand and the private Act of the National Bank of New Zealand (Limited) provide that in the event of the assets being insufficient to meet the engagements no proprietor shall be responsible beyond the extent of twice the amount of his or her subscribed shares, only (that is to say) for the amount subscribed, and for a further additional amount equal thereto; and the private Acts of the same two banks contain the following clause: "That the total amount of promissory notes payable on demand, issued and in circulation within the Dominion, shall not at any time exceed the amount of coin, bullion, and public securities which shall for the time being be held by the same corporation within the Dominion; nor shall the proportion of coin be less than one-third part of the amount of the coin, bullion, and public securities so held by the said corporation within the Dominion."

The Banking Act, 1908, consolidates the law of New Zealand relating to the general business of banking in the Dominion. The Act provides that the incorporation of banks by Royal Charter shall be as effectual within New Zealand as Acts of the General Assembly. The number of directors is prescribed, and authority given to any bank to increase its capital on a resolution of the shareholders. Transfers of shares on which there is any liability must be approved by the directors, or their duly appointed attorney or attorneys. The Governor may empower any bank to issue and circulate notes, subject to the provisions and restrictions contained in the charter or letters patent under which such bank is incorporated, all such notes to be payable in gold only at the office of the bank at the place of issue, such notes to be a first charge on all assets of the bank. Defacing bank-notes is an offence punishable by fine. Every bank trading in the Dominion is required to furnish quarterly statements of its business, for publication in the *Gazette*. A sworn copy of an entry in the books of a bank shall in all legal proceedings be evidence of such entry, and a bank is not required in any legal proceedings to which it is not a party to produce its books before a Court, unless ordered by a Judge, for special cause. Provision is made for bank holidays and for the destruction of cheques, drafts, bills of exchange, or promissory notes, after the expiration of ten years from the date or due date of such documents.

Part II of the Bills of Exchange Act, 1908, consolidates the law relating to cheques on a bank.

The Companies Act, 1908, with the exception of Part IX (as to companies incorporated outside New Zealand), and also of the provisions relating to branch registers, does not apply to companies

formed within and carrying on business within the Dominion, but the whole Act applies to companies incorporated outside the Dominion.

THE BANK OF NEW ZEALAND ACT, 1903.

This Act was passed in anticipation of guaranteed shares or stock issued under the authority of the Act of 1894, to the extent of two million pounds sterling, reaching maturity on the 19th July of the year 1904, and of the expiry of the term of currency of the debentures issued by the Assets Realization Board (31st March, 1904). It also makes provisions under which the remaining liability of the proprietors of the Bank, under section 21 of the Banking Act, 1861, ranks as ordinary uncalled capital, and for the issue of fresh shares to the Government in lieu of the preferred shares originally issued to the Crown, but afterwards repurchased by the Bank. Besides the above, the Act deals with other matters affecting the business of the Bank and the Assets Realization Board.

Ordinary Shares.

Every ordinary share in the Bank is deemed to be a share of the nominal value of £6 13s. 4d., paid up to the extent only of the amount actually paid on account of instalments of the call in respect of such share, leaving a liability of the balance of instalments, and the further liability of £3 6s. 8d. per share, but no more.

New Guaranteed Stock.

The guaranteed stock issued under the Share Guarantee Act, 1894, to the extent of two million pounds, matured on the 19th July, 1904, and has been redeemed by the Bank, and a new issue of guaranteed stock, representing the sum of one million pounds sterling, having a currency not exceeding ten years, has been made in lieu thereof.

Preference Shares.

The preferred shares, representing £500,000 new capital, issued under the authority of the Bank of New Zealand and Banking Act, 1895, and subsequently repurchased by the Bank, have been cancelled; and in lieu thereof the Government of New Zealand purchased 75,000 preference shares of the Bank, fully paid, representing £500,000 new capital. These shares rank for dividend purposes in priority to ordinary shares to the extent of 5 per cent. per annum (non-cumulative), and for dividends in excess of 5 per cent. they are entitled to only half the rate payable on ordinary shares; so that where, for example, the dividend on the ordinary shares is at the rate of 6 per cent. the dividend on the preference shares will be at the rate of 3 per cent. The maximum rate of dividend payable on preference shares is 10 per cent., while that payable on ordinary shares is not limited. Otherwise the preference shares confer the same rights and privileges as ordinary shares.

Assets Realization Board. (Since defunct; see last paragraph.)

The Act empowered the Assets Board, for the purpose of redeeming such of its debentures as might be outstanding at maturity, to issue fresh debentures, with currency of five years, for a sum not exceeding in all the face value of the residue of the outstanding debt, and bearing interest at a rate not higher than 3½ per cent. per annum.

The properties vested in the Assets Board were to be valued at appointed times, and the actual deficiency between such value and the amount of outstanding debentures ascertained. When the assets were found to be sufficient to meet liabilities, the Governor by Order in Council declared that the Board should cease to exist, its properties being handed over to the Bank, which thereupon was empowered to redeem all the outstanding debentures of the Board.

A Proclamation by the Governor in Council was published in a supplement to the *New Zealand Gazette*, dated 7th December, 1906, to the effect that valuations in the terms of the above provisions having been duly made and confirmed

by the Valuer-General, the assets were found to be sufficient to meet the outstanding liabilities, and the Assets Realization Board, from the 17th December, 1906, should cease to exist.

Other Provisions.

December and June, as the dates for holding the half-yearly and annual meetings, are substituted for February and August. Special provision for voting at elections of directors (by papers forwarded and returned through the post) is made, and the date of election of the chairman is altered from January to April.

THE BANK OF NEW ZEALAND ACT, 1904.

The capital stock of one million pounds sterling issued by the Bank under authority of the Act of 1903, is to have priority, both as to capital and dividend, as against the assets of the Bank, over all existing shares of the Bank, whether preference or ordinary. Further provisions of this Act deal with the form in which the stock may be issued, the issue of fresh certificates on transfer, loss, or destruction of certificates or warrants, also as to the countersigning of certificates or warrants.

The appointment and term of office of Auditors is also dealt with.

There are five banks of issue trading in New Zealand, two of these institutions, the Bank of New Zealand and the National Bank of New Zealand, being incorporated by special Acts of the General Assembly of the Dominion. The Bank of New Zealand has branches in London, Australia, and Fiji, while its branches and agencies within the Dominion number 165, the other four banks having between them 184 such establishments, a total of 349, being an average of one bank to every 2,873 inhabitants, as against one bank to every 2,300 inhabitants in the Commonwealth of Australia.

The paid-up capital of the above banks, their reserve funds, the rate and amount of their last dividend as on the 31st December, 1910, was as follows:—

Bank.	Paid-up Capital.	Rate per Cent. per Annum of Last Dividend and Bonus.	Amount of Last Half-yearly Dividend and Bonus.	Reserve Fund.
Bank of New Zealand— 4-per-cent. stock guaranteed by Government of New Zealand	£ 1,000,000	Per Cent. 4*	£ 40,000*	£ ..
Preferred shares subscribed for by Government of New Zealand	500,000	8½	43,750†	} 864,134
Capital payable by shareholders	500,000	10 and bonus 2½ per cent.	62,500†	
Union Bank of Australia (Limited)	1,500,000	10 and bonus 4 per cent.	105,000	1,454,928
Bank of New South Wales	2,726,880	10	133,710	1,850,000
Bank of Australasia ..	1,600,000	12 and bonus 4 per cent.	128,000	1,775,100
National Bank of New Zealand (Limited)	500,000	14	26,250	444,660
	8,326,880			6,388,822

* Interest on stock.

† For twelve months.

The development of banking in New Zealand since the year 1857 has been very great. Taking for each year the average of the four quarters' returns made by the banks of issue, the figures for 1857, 1870, 1880, 1890, 1900, 1908, 1909, and 1910, are :—

Year.		Deposits.	Advances.	Assets.	Liabilities.
		£	£	£	£
1857		343,316	..	419,860	432,494
1870		3,127,769	4,547,217	6,315,354	3,819,670
1880		8,538,935	11,300,404	14,220,275	9,550,177
1890		12,368,610	14,096,446	17,735,259	13,356,598
1900		15,570,610	12,084,744	17,314,535	16,964,582
1908		21,821,753	22,495,576	29,098,567	23,611,903
1909		21,996,621	20,386,367	26,937,265	23,728,326
1910		24,968,761	19,772,656	26,398,927	26,742,081

In 1880 the deposits of these banks were £18 per head of the mean population; in 1890 they were £19·92 per head; in 1900 they were £20·39, and in 1910, £25·15. The ratio of advances to deposits, which was 132·34 per cent. in 1880, reached its maximum in 1883, when it stood at 173·35 per cent. The proportion since that year fell, till in 1903 it was only 75·96 per cent. In 1904 the ratio stood at 82·10 per cent., in 1905 at 80·77 per cent., in 1906 at 79·54 per cent., in 1908 at 103·08 per cent., and in 1910 at 79·19 per cent.

In 1886 the average amount of advances made by the banks was £15,853,420, equal to £27·23 per head of the mean population. The advances gradually declined in amount and proportion to population until 1891, when they were in value £11,549,145, or £18·34 per head. In 1897 advances stood at £10,892,111, or £15·09 per head, which is the lowest average since the year 1872. From thence there was continuous rise both in amounts of advances and rates per head of population until 1908, for which year the figures were £22,495,576, or £23·80 per head. In 1909 they stood at £20,386,367, or £20·98 per head; and in 1910, £19,772,656, or £19·92 per head. The discounts in 1908 amounted to £2,235,209, or £2·37 per head of mean population, and in 1910 to £1,741,984 or £1·75 per head. The largest amount of discounts in any year was £6,061,959 in 1879, a rate of £13·53 per head. From 1879 there was a fall year by year until 1896, when the sum was £1,756,791, or £2·49 per head, since when the ratio has fluctuated between £2·45 and £1·75 per head.

Liabilities.

The liabilities of the five banks, taking an average of the four quarters of each year since 1900, are shown in the next table. The figures which follow refer to the New Zealand business only.

GRAPHS SHOWING THE DEPOSITS, ASSETS, AND
LIABILITIES OF BANKS OF ISSUE IN NEW
ZEALAND, 1857-1910.



EXPLANATION OF GRAPHS.—The base of each square represents an interval of one year, and the vertical height five hundred thousand pounds sterling.

Assets shown thus —————
 " Liabilities " - - - - -
 " Deposits "

Year.	Notes in Circulation.	Bills in Circulation.	Balances due to other Banks.	Deposits.	Total Liabilities.
	£	£	£	£	£
1901	1,361,355	51,296	42,536	16,034,848	17,490,035
1902	1,375,788	57,107	36,400	17,231,768	18,701,063
1903	1,450,267	56,162	46,336	19,011,114	20,563,879
1904	1,468,161	54,409	45,829	19,074,960	20,643,359
1905	1,468,977	77,055	52,533	20,545,601	22,144,166
1906	1,574,254	91,969	54,542	22,422,243	24,143,008
1907	1,644,645	97,727	74,865	23,517,111	25,334,348
1908	1,615,109	93,300	81,741	21,821,753	23,611,903
1909	1,577,557	93,582	60,565	21,996,621	23,728,326
1910	1,626,094	93,603	53,622	24,968,761	26,742,080

Assets.

The average assets, as shown below, for the periods corresponding to those above, include Colonial Government securities, which in 1910 amounted to £1,277,642.

Year.	Coin and Bullion.	Notes and Bills discounted.	Debts due, exclusive of Bad Debts.	All other Assets.	Total Assets.
	£	£	£	£	£
1901	2,996,345	1,896,869	10,251,466	3,277,594	18,422,274
1902	3,201,824	1,814,639	10,933,135	3,049,582	18,999,180
1903	3,608,941	1,893,808	11,542,185	2,868,612	19,913,546
1904	3,896,195	2,072,356	12,578,842	2,345,703	20,893,096
1905	4,006,108	2,125,511	13,370,885	2,268,021	21,770,525
1906	4,593,954	2,068,404	14,580,925	2,586,650	23,829,933
1907	4,836,718	2,014,848	16,499,197	3,233,476	26,584,239
1908	4,840,942	2,235,209	18,937,599	3,084,817	29,098,567
1909	4,947,096	1,928,178	17,149,854	2,912,137	26,937,265
1910	5,035,764	1,741,984	16,698,015	2,923,164	26,398,927

Deposits and Advances.

The total amount of deposits, the amount per head of population, the total advances, and the ratio of advances to deposits, taking the average of the four quarters for each of the past ten years, is as follows :—

Year.	Deposits.		Advances.	
	Total Amount.	Per Head of Population.	Total Amount.	Ratio to Deposits.
	£	£ s. d.	£	Per Cent.
1901	16,034,848	20 12 2	13,106,909	81·74
1902	17,231,768	21 12 0	13,666,457	79·31
1903	19,011,114	23 3 7	14,440,403	75·96
1904	19,074,960	22 11 5	15,661,253	82·10
1905	20,545,601	23 12 5	16,595,156	80·77
1906	22,422,243	25 0 10	17,833,640	79·54
1907	23,517,111	25 11 10	19,838,799	84·35
1908	21,821,753	23 1 10	22,495,576	103·08
1909	21,996,621	22 10 2	20,386,367	92·68
1910	24,968,761	25 3 0	19,772,656	79·19

SAVINGS-BANKS.

The number of post-offices open for the transaction of savings-bank business at the end of 1910 was 647.

There were 78,566 new accounts opened in the year, and 57,695 accounts were closed. The total number of open accounts at the end of 1910 was 380,585, or 1 in every 2·76 of the population.

The deposits received during the year amounted to £10,708,939, and the withdrawals to £9,695,515, the excess of deposits over withdrawals having thus been £1,013,424. The total sum standing at credit of all accounts on the 31st December, 1910, was £14,104,990 which gave an average of £37 ls. 3d. to the credit of each open account.

The number of open accounts (as on the 31st December) for five years are classified according to amounts at credit of each :—

	1904.	1906.	1908.	1909.	1910.
Not exceeding £20	187,631	212,605	244,459	257,174	270,812
Exceeding £20 and up to £50	28,231	33,314	37,069	38,998	40,931
“ £50 “ £100	18,363	21,748	24,021	25,409	26,966
“ £100 “ £200	15,583	17,752	19,790	20,577	22,070
“ £200 “ £300	5,624	7,585	8,591	8,902	9,536
“ £300 “ £400	1,918	2,841	3,872	4,259	4,761
“ £400 “ £500	956	1,506	1,988	2,088	2,544
“ £500	858	1,395	2,287	2,307	2,965*
Totals	259,164	298,746	342,077	359,714	380,585

* Exceeding £500 and not exceeding £600, 1,651 depositors, exceeding £600, 1,314 depositors.

The following were the securities standing in the name of the Postmaster-General on account of the Post-Office Savings-Bank Fund on the 31st December, 1910:—

Description of Securities.	Nominal Value.			Value at Cost Price.		
	£	s.	d.	£	s.	d.
The Aid to Public Works and Land Settlement Act 1899 Debentures, $3\frac{1}{2}$ per cent. ..	125,000	0	0	125,000	0	0
The Aid to Public Works and Land Settlement Act 1900 Debentures, $3\frac{1}{2}$ per cent. ..	56,500	0	0	56,500	0	0
The Aid to Public Works and Land Settlement Act 1901 Debentures, $3\frac{1}{2}$ per cent. ..	32,600	0	0	32,600	0	0
The Aid to Public Works and Land Settlement Act 1901 Debentures, 4 per cent. ..	2,500	0	0	2,500	0	0
The Aid to Public Works and Land Settlement Act 1902 Debentures, 4 per cent. ..	2,700	0	0	2,700	0	0
The Aid to Public Works and Land Settlement Act 1902 Debentures, $3\frac{1}{2}$ per cent. ..	125,000	0	0	125,000	0	0
The Aid to Public Works and Land Settlement Act 1903 Debentures, 4 per cent. ..	167,900	0	0	167,900	0	0
The Aid to Public Works and Land Settlement Act 1903 Debentures, $3\frac{1}{2}$ per cent. ..	61,525	0	0	61,525	0	0
The Aid to Public Works and Land Settlement Act 1906 Debentures, 4 per cent. ..	51,550	0	0	51,550	0	0
The Aid to Public Works and Land Settlement Act 1906 Debentures, $3\frac{1}{2}$ per cent. ..	500,000	0	0	500,000	0	0
The Aid to Public Works and Land Settlement Act 1907 Debentures, $3\frac{1}{2}$ per cent. ..	200,000	0	0	200,000	0	0
The Aid to Public Works and Land Settlement Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	50,000	0	0	50,000	0	0
Canadian Stock, 3 per cent. ..	5,000	0	0	4,800	0	0
Canadian Stock, $2\frac{1}{2}$ per cent. ..	12,666	15	11	10,133	8	9
The Cape of Good Hope Consolidated Stock, $3\frac{1}{2}$ per cent. ..	200	0	0	186	1	3
The Coal-mines Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	30,000	0	0	30,000	0	0
The Consolidated Loan Act 1867 Debentures, 4 per cent. ..	13,000	0	0	12,480	0	0
The Consolidated Stock Act 1884 Debentures, $3\frac{1}{2}$ per cent. ..	194,200	0	0	194,200	0	0
The Consolidated Stock Act 1884 Debentures, $3\frac{1}{2}$ per cent. ..	283,500	0	0	283,500	0	0
The Consolidated Stock Act 1884 Debentures, $3\frac{1}{2}$ per cent. ..	165,000	0	0	165,000	0	0
The Dairy Industry Act 1898 Debentures, $3\frac{1}{2}$ per cent. ..	438	0	0	438	0	0
The Dairy Industry Act 1898 Debentures, $3\frac{1}{2}$ per cent. ..	1,343	0	0	1,343	0	0
The Defence and other Purposes Loan Act 1870 Debentures, $3\frac{1}{2}$ per cent. ..	8,100	0	0	8,100	0	0
The Defence and other Purposes Loan Act 1870 Debentures, 4 per cent. ..	75,000	0	0	72,000	0	0
Dunedin Garrison Hall Debentures, $4\frac{1}{2}$ per cent. ..	4,500	0	0	4,500	0	0
The General Purposes Loan Act 1873 Debentures, 4 per cent. ..	5,200	0	0	4,342	0	0
The Government Advances to Settlers Act 1894 Debentures, $3\frac{1}{2}$ per cent. ..	300,000	0	0	300,000	0	0

Description of Securities.	Nominal Value.			Value at Cost Price.		
	£	s.	d.	£	s.	d.
The Government Advances to Settlers Act 1906 Debentures, $3\frac{1}{2}$ per cent. ..	555,000	0	0	555,000	0	0
The Government Advances to Settlers Act 1908 Debentures, 4 per cent. ..	12,900	0	0	12,964	10	0
The Government Advances to Settlers Extension Act 1901 Debentures, $3\frac{1}{2}$ per cent. ..	80,000	0	0	80,000	0	0
The Government Advances to Workers Act 1906 Debentures, $3\frac{1}{2}$ per cent. ..	25,000	0	0	25,000	0	0
The Government Advances to Workers Act 1906 Debentures, $3\frac{1}{2}$ per cent. ..	205,000	0	0	205,000	0	0
The Government Loans to Local Bodies Act 1886 Debentures, $3\frac{1}{2}$ per cent. ..	231,500	0	0	231,500	0	0
The Government Railways Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	85,000	0	0	85,000	0	0
The Government Railways Act 1908 and Finance Act 1909 Debentures, $3\frac{1}{2}$ per cent. ..	50,000	0	0	50,000	0	0
The Government Railways Amendment Act 1910 Debentures, $3\frac{1}{2}$ per cent. ..	50,350	0	0	50,350	0	0
The Government Railways Amendment Act 1910 Debentures, $3\frac{1}{2}$ per cent. ..	1,150	0	0	1,150	0	0
Greymouth Harbour Board Debentures, 4 per cent. ..	200,000	0	0	200,000	0	0
Hamilton Borough Debentures, $4\frac{1}{2}$ per cent. ..	3,000	0	0	3,000	0	0
The Hutt Railway and Road Improvement Act 1903 Debentures, $3\frac{1}{2}$ per cent. ..	45,000	0	0	45,000	0	0
The Hutt Railway and Road Improvement Act 1905 Debentures, $3\frac{1}{2}$ per cent. ..	105,000	0	0	105,000	0	0
The Hutt Railway and Road Improvement Act 1907 Debentures, $3\frac{1}{2}$ per cent. ..	67,000	0	0	67,000	0	0
The Hutt Railway and Road Improvement Act 1907 Debentures, $3\frac{1}{2}$ per cent. ..	27,590	0	0	27,590	0	0
The Hutt Railway and Road Improvement Act 1910 Debentures, $3\frac{1}{2}$ per cent. ..	15,000	0	0	15,000	0	0
The Immigration and Public Works Loan Act 1870 Debentures, $4\frac{1}{2}$ per cent. ..	20,900	0	0	20,527	10	0
The Immigration and Public Works Loan Act 1870 Debentures, 4 per cent. ..	175,300	0	0	168,372	0	0
India Stock, $3\frac{1}{2}$ per cent. ..	216	14	5	213	18	9
India Stock, 3 per cent. ..	52	13	9	45	15	0
Inscribed Stock, $3\frac{1}{2}$ per cent. ..	618,000	0	0	618,000	0	0
Inscribed Stock, 3 per cent. ..	2,260,495	11	12	2,244,582	18	0
Irish Land Stock, $2\frac{3}{4}$ per cent. ..	100	0	0	89	15	0
The Land for Settlements Act 1908 Debentures, 4 per cent. ..	200	0	0	200	0	0
The Land for Settlements Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	76,150	0	0	76,150	0	0
The Land for Settlements Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	62,000	0	0	62,000	0	0
The Land for Settlements Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	27,000	0	0	27,000	0	0
The Land for Settlements Consolidation Act 1900 Debentures, $3\frac{1}{2}$ per cent. ..	741,066	0	0	741,066	0	0
The Land for Settlements Consolidation Act 1900 Debentures, 4 per cent. ..	11,650	0	0	11,650	0	0
The Land for Settlements Consolidation Act 1900 Debentures, 4 per cent. ..	1,700	0	0	1,700	0	0

Description of Securities.	Nominal Value.			Value at Cost Price.		
	£	s.	d.	£	s.	d.
The Land for Settlements Consolidation Act 1900 Debentures, $3\frac{1}{2}$ per cent. ..	10,650	0	0	10,650	0	0
The Land for Settlements Consolidation Act 1900 Debentures, $3\frac{1}{2}$ per cent. ..	18,000	0	0	18,000	0	0
The Lands Improvement and Native Lands Acquisition Act 1894 Debentures, $3\frac{1}{2}$ per cent. ..	339,000	0	0	339,000	0	0
The Local Bodies' Loans Act 1901 Debentures, $3\frac{1}{2}$ per cent. ..	516,000	0	0	516,000	0	0
The Local Bodies' Loans Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	785,000	0	0	785,000	0	0
The Local Bodies' Loans Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	150,000	0	0	150,000	0	0
The Local Bodies' Loans Act 1908 Debentures, $2\frac{1}{2}$ per cent. ..	370,000	0	0	370,000	0	0
The Maori Land Settlement Act 1905 Debentures, 4 per cent. ..	750	0	0	750	0	0
The Maori Land Settlement Act 1905 Debentures, $3\frac{1}{2}$ per cent. ..	24,900	0	0	24,900	0	0
The Maori Land Settlement Act Amendment Act 1907 Debentures, $3\frac{1}{2}$ per cent. ..	50,000	0	0	50,000	0	0
New South Wales Stock, $3\frac{1}{2}$ per cent. ..	27,000	0	0	26,865	0	0
The New Zealand Land for Settlements Act 1908 and State-guaranteed Advances Amendment Act 1910 Debentures, $3\frac{1}{2}$ per cent. ..	28,175	0	0	28,175	0	0
The New Zealand State-guaranteed Advances Act 1909 Debentures, $3\frac{1}{2}$ per cent. ..	400,000	0	0	400,000	0	0
The New Zealand State-guaranteed Advances Act 1909 Debentures, $3\frac{1}{2}$ per cent. ..	595,000	0	0	595,000	0	0
Oamaru Borough Consolidated Loan 1893 Debentures, 5 per cent. ..	13,800	0	0	13,800	0	0
Oamaru Harbour Board, Bonds, $5\frac{1}{2}$ per cent. ..	28,000	0	0	28,000	0	0
Patea Harbour Board Debentures, $4\frac{1}{2}$ per cent. ..	30,000	0	0	30,000	0	0
The Post-Office Savings-Bank Funds Investment Act 1907 Debentures, $3\frac{1}{2}$ per cent. ..	125,000	0	0	125,000	0	0
The Post and Telegraph Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	75,000	0	0	75,000	0	0
The Railways Improvement Authorization Act 1907 Debentures, $3\frac{1}{2}$ per cent. ..	25,000	0	0	25,000	0	0
The Reserve Fund Securities Act 1907 Debentures, $3\frac{1}{2}$ per cent. ..	800,000	0	0	800,000	0	0
The Scenery Preservation Act 1903 Debentures, $3\frac{1}{2}$ per cent. ..	30,000	0	0	30,000	0	0
The Scenery Preservation Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	10,000	0	0	10,000	0	0
South Australian Stock, 4 per cent. ..	1,772	16	2	1,861	9	0
South Australian Stock, $3\frac{1}{2}$ per cent. ..	12,000	0	0	11,760	0	0
The State Coal-mines Act 1908 Debentures, $3\frac{1}{2}$ per cent. ..	100,000	0	0	100,000	0	0
The State Fire Insurance Act 1903 Debentures, 4 per cent. ..	500	0	0	500	0	0
The State Fire Insurance Act 1903 Debentures, $3\frac{1}{2}$ per cent. ..	1,500	0	0	1,500	0	0
Thames Harbour Board Debentures, 4 per cent. ..	10,000	0	0	10,000	0	0

Description of Securities.	Nominal Value.			Value at Cost Price.		
	£	s.	d.	£	s.	d.
The Public Revenues Act 1908 Debentures (Treasury Bills), $3\frac{1}{2}$ per cent.	300,000	0	0	300,000	0	0
Victorian Stock, 3 per cent.	12,379	19	10	10,708	13	10
Wellington City Council Debentures, 4 per cent.	100,000	0	0	99,000	0	0
Wellington City Council Debentures, 4 per cent.	25,000	0	0	24,500	0	0
Wellington Harbour Board Debentures, $4\frac{1}{2}$ per cent.	28,900	0	0	28,900	0	0
Westport Harbour Board Debentures, 4 per cent.	489,500	0	0	489,500	0	0
Totals	13,759,571	11	2	13,725,819	19	7

Most of this fund is invested in securities of the New Zealand General Government. Summarizing, the figures shows the investments to be:—

In New Zealand Government securities ..	£ 12,485,892	11	1
In local bodies' securities	1,202,290	0	0
In other securities	71,389	0	1
Total	£13,759,571	11	2

There are five savings-banks not connected with the Post Office. The total amount deposited in them in 1910 was £1,338,336, of which the deposits by Maoris comprised £391. The withdrawals reached the sum of £1,269,973, or £68,383 less than the deposits. The total amount to the credit of the depositors at the end of the year was £1,515,525, of which sum £267 belonged to Maoris.

The deposits in the savings-banks of New South Wales on 31st December, 1909, of the other States of the Commonwealth on 30th June, 1910, and of New Zealand on 31st December, 1910, were as given below. The figures for Australian States are taken from the Official Year-book of the Commonwealth:—

State.	Number of Depositors.	Amount on Deposit at End of Year.	Average Amount per Depositor at End of Year.	Deposits to Credit per Head of Population.
		£	£ s. d.	£ s. d.
New South Wales ..	460,521	20,150,574	43 15 8	12 5 3
Victoria	560,515	15,417,888	27 10 1	11 16 2
Queensland	114,720	5,622,986	49 0 4	9 12 7
South Australia ..	*201,275	6,791,320	33 14 10	16 5 0
Western Australia ..	†86,166	3,481,764	40 8 2	12 10 10
Tasmania	60,646	1,652,966	27 5 1	8 19 3
Commonwealth ..	1,483,573	53,117,498	35 16 1	12 0 3
New Zealand	432,119	15,620,515	36 3 0	15 11 7

* Inclusive of 6,881 depositors in school penny savings-banks.
4,590 depositors in school penny savings-banks.

† Inclusive of

SUMMARY OF ALL DEPOSITS.

If the total deposits in the banks of issue at the end of the year be assumed to be equal to the average deposits for the four quarters of the year, then it may be affirmed that, exclusive of Government moneys, the deposits in the said banks of issue and in the two classes of savings-banks amounted at the end of 1910 to £38,183,562. In addition, there are the deposits with building societies, which in 1909 were £460,376, and it is known that there were also deposits with financial companies of which no particulars have been supplied. The ascertained deposits reach an average of £38 10s. 9d. per head of the population, exclusive of Maoris.

BUILDING SOCIETIES.

There were 111 registered building societies in operation on the 31st March, 1909. Of these, 75 were terminable societies, and 36 were permanent.

The dates upon which these societies close their accounts vary considerably within the year, but the figures given below may be taken as corresponding to the periods stated. The liabilities and assets of all the societies at the close of each of five financial years were as follows:—

LIABILITIES OF BUILDING AND INVESTMENT SOCIETIES, 1905-6 TO 1909-10.

Year	To Shareholders including Reserve Funds and Undivided Profits)	Deposits.	To Bankers and other Creditors.	Total Liabilities.
	£	£	£	£
1905-6 ..	1,316,205	433,490	43,462	1,793,157
1906-7 ..	1,429,254	484,991	77,955	1,992,200
1907-8 ..	1,588,606	523,544	93,696	2,205,846
1908-9 ..	1,731,567	505,680	89,737	2,326,984
1909-10 ..	1,779,745	460,376	104,171	2,344,292

ASSETS OF BUILDING AND INVESTMENT SOCIETIES, 1905-6 TO 1909-10.

Year.	Advances on Mortgage.	Other Investments.	Cash in Hand and on Deposit.	Total Assets.
	£	£	£	£
1905-6 ..	1,685,574	37,256	70,327	1,793,157
1906-7 ..	1,867,213	44,543	80,444	1,992,200
1907-8 ..	2,065,163	56,983	83,700	2,205,846
1908-9 ..	2,187,444	43,505	96,034	2,326,983
1909-10 ..	2,180,053	50,072	114,167	2,344,292

JOINT-STOCK COMPANIES.

During the year ended 31st December, 1910, 283 joint-stock companies were registered, with a total nominal capital of £2,663,968, including 102 private companies, with a nominal capital of £841,103, and thirty-eight mining companies, with a nominal capital of £580,890.

The following table gives the total number of companies and the aggregate nominal capital registered during each of the five years 1906-10:—

JOINT-STOCK COMPANIES REGISTERED, 1906-10.

Year.						Number of Companies registered.	Aggregate Nominal Capital.
						£	
1906	..	..	..	..	..	263	5,175,515
1907	..	..	..	..	..	290	6,405,295
1908	..	..	..	..	..	283	4,364,952
1909	..	..	..	..	..	290	3,224,656
1910	..	..	..	..	..	283	2,663,968

FRIENDLY SOCIETIES.

The Registrar of Friendly Societies received returns for the year 1910 from 609 lodges, courts, tents, &c., having a membership at the end of the year of 68,006.

The total value of the assets of these societies was £1,367,282, of which the value of the sick and funeral benefit funds was £1,263,820.

The receipts during the year on account of the sick and funeral funds amounted to £197,548, and the expenditure to £127,970, of which the sick-pay to members reached the sum of £69,677. In addition to the sick-pay, the sum of £63,509 was paid out of the medical and management expenses fund for attendance given and medicine supplied to the members and their families.

The total membership and funds of the 609 lodges, courts, and of the various orders at 31st December, 1910, was:—

FRIENDLY SOCIETIES.—MEMBERSHIP AND FUNDS, 1910.

Name of Order.						Number of Members.	Total Worth of Funds.
							£
Independent Order of Oddfellows, M.U.	..	..	..	..	..	22,509	638,937
Independent Order of Oddfellows of N.Z.	..	..	..	..	..	4,980	83,926
National Independent Order of Oddfellows	..	..	..	..	..	483	5,164
British United Order of Oddfellows	..	..	..	..	..	149	2,660
Ancient Order of Foresters	..	..	..	..	..	16,042	337,159
Ancient Order of Shepherds	..	..	..	..	..	91	1,262
United Ancient Order of Druids	..	..	..	..	..	16,600	169,309
Independent Order of Rechabites	..	..	..	..	..	2,913	62,826
Sons and Daughters of Temperance	..	..	..	..	..	697	17,437
Hibernian Australasian Catholic Benefit Society	..	..	..	..	..	2,546	25,917
Protestant Alliance Friendly Society of Australasia	..	..	..	..	..	883	18,395
Railway Employees' Benefit Society	..	..	..	..	..	70	2,335
Eden Temperance Benefit Friendly Society	..	..	..	..	..	38	1,965
Totals	..	..	..	..	..	68,006	1,367,282

The next table shows the progress of the Friendly Societies of New Zealand during ten years:—

FRIENDLY SOCIETIES.—MEMBERSHIP AND FUNDS, 1901–10.

Year.	Number of Lodges tabulated.	Number of Members.	Total Funds.	Average Capital.
			£	£ s. d.
1901	445	41,236	804,753	19 10 4
1902	462	43,408	846,315	19 9 11
1903	465	45,255	883,751	19 10 7
1904	479	47,302	936,388	19 15 11
1905	501	51,103	996,224	19 9 11
1906	500	53,759	1,057,821	19 13 6
1907	516	56,817	1,118,217	19 13 7
1908	505	58,517	1,123,886	19 4 1
1909	567	64,428	1,266,297	19 13 1
1910	609	68,006	1,367,282	20 2 1

The value of the various funds and the way in which they are invested will be seen by the following table. The funds include those of the central bodies.

FRIENDLY SOCIETIES.—FUNDS AND ASSETS ON 31ST DECEMBER, 1910.

Funds.	—	Assets.	—
	£		£
Sick and Funeral Funds ..	1,221,372	Investments bearing interest—mortgages on freehold property	986,042
Surplus Appropriation Funds, &c.	42,448	Bank deposits ..	89,210
Management Funds, goods, &c.	70,502	Government and Municipal debentures	46,255
Widow and Orphans' Funds	11,478	Other investments ..	13,241
Distress, Benevolent Funds, &c.	21,482	Land and buildings ..	164,149
		Cash not bearing interest	44,367
		Other assets ..	24,018
Total ..	1,367,282	Total ..	1,367,282

Interest-bearing investments form 83 per cent. of the total assets. The net income from investments credited to the Sick and Funeral Funds during the year 1910 was £56,786, the average rate of interest earned being £4 18s. 1d. per cent., as compared with £4 18s. 8d. in 1909.

Particulars of the number of members, the amount of their accumulated capital, and the average capital per member of the friendly societies in Australasia, according to the latest published statistics, are arranged in order of membership:—

FRIENDLY SOCIETIES IN AUSTRALASIA.—MEMBERSHIP AND FUNDS.

State.	Date of Return.	Number of Lodges.	Number of Members.	Amount of Funds.	Capital per Member.
				£	£ s. d.
Victoria ..	31st Dec., 1909	1,441	136,340	2,012,417	14 15 2
New South Wales ..	" 1909	1,492	113,216	1,335,379	11 15 10
New Zealand ..	" 1910	609	68,006	1,367,282	20 2 1
South Australia ..	" 1906	506	52,165	743,795	14 5 2
Queensland ..	" 1909	464	39,871	503,812	12 12 8
Tasmania ..	" 1909	168	20,141	188,509	9 7 2
Western Australia ..	" 1909	260	16,044	147,186	9 3 6

MORTGAGES.

In a return prepared for the House of Representatives it is stated that during the year ended 31st March, 1909, mortgages to the value of £17,889,525 were registered in the several land registration districts, while the monetary value of those paid off amounted to £9,022,103. Compared with a similar return for the year 1907-8 the mortgages registered show a decrease of £442,081, the total amount for the earlier year having been £18,331,606.

The amounts shown in the following tables do not represent the true amounts of advances secured by deed. In cases where the property mortgaged is situated in more than one registration district the deed is registered for the full amount in each district, thus there is some degree of duplication. On the other hand, mortgages are not all registered, such given in security for temporary loans, stock, and crop liens, bills of sale, and chattels transfers are not included in the figures.

The total amounts represented in the mortgages registered and paid off in each registration district during 1907-8 and 1908-9 were:—

District.	1907-8.		1908-9.	
	Mortgages registered. £	Mortgages paid off. £	Mortgages registered. £	Mortgages paid off. £
Auckland ..	2,427,093	1,436,703	2,479,468	1,165,498
Poverty Bay ..	571,703	448,595	794,035	400,679
Taranaki ..	1,548,016	865,607	1,414,869	739,839
Hawke's Bay ..	1,718,773	1,334,612	1,445,736	609,436
Wellington ..	5,759,122	3,679,651	5,404,870	2,589,986
Marlborough ..	294,102	110,929	301,549	165,822
Nelson ..	344,760	174,377	371,078	157,198
Westland ..	78,994	33,244	77,857	26,763
Canterbury ..	3,295,790	2,991,178	3,469,054	1,838,042
Otago ..	1,374,740	1,035,405	1,363,197	745,639
Southland ..	918,523	654,870	767,812	583,201
Totals ..	£18,331,616	£12,765,171	£17,889,525	£9,022,103

Classified according to the various rates of interest, the amounts in the mortgage deeds registered during the two years were:—

1907-8.		1908-9		Rate of Interest.
£		£		
8,234	..	..	..	free of interest.
165,524	..	100,131	..	at 4 per cent. or under.
2,597,170 (a)	..	1,494,136 (f)	..	at 4½ per cent.
388,767 (b)	..	74,908	..	at 4¾ per cent.
6,928,027	..	5,307,438	..	at 5 per cent.
88,705 (c)	..	60,939	..	at 5¼ per cent.
1,597,335 (d)	..	2,817,869 (g)	..	at 5½ per cent.
7,278	..	136,265	..	at 5¾ per cent.
2,067,555	..	3,124,815	..	at 6 per cent.
1,802	..	8,200	..	at 6¼ per cent.
175,524	..	370,695 (h)	..	at 6½ per cent.
1,006 (e)	..	475 (i)	..	at 6¾ per cent.
532,236	..	667,690 (j)	..	at 7 per cent.
41,181	..	70,769 (k)	..	at 7½ per cent.
299,809	..	512,348 (l)	..	at 8 per cent.
193,410	..	201,235	..	at 8½ per cent. and over.
3,238,053	..	2,941,572	..	at rates not specified.
£18,331,616		£17,889,525		

(a) Including £31,645 at 4¼ per cent. (b) Including £755 at 4¾ per cent.
 cent. (c) Including £30,200 at 5½ per cent. (d) Including £12,000 at 5½ per cent.
 at 4¼ per cent. (e) Including £800 at 6¾ per cent. (f) Including £2,000 at 4¼ per cent.
 (g) Including £2,410 at 5½ per cent. and £2,730 at 5¾ per cent. (h) Including £1,500 at 6½ per cent. (i) Including £200 at 6¾ per cent.
 (j) Including £530 at 6¾ per cent. (k) Including £85 at 7½ per cent. (l) Including £900 at 8¼ per cent. and £600 at 8½ per cent.

Comparison of the foregoing with the amounts at the various rates of interest in the mortgages registered during 1895-96 shows the lowering of the rates that has taken place:—

Year 1895-96.

£		
26,285	..	.. in small sums at less than 5 per cent.
833,226	..	.. at from 5 per cent. to 5½ per cent.
732,764	..	.. at 5½ per cent.
116,600	..	.. at 5¾ per cent.
1,372,261	..	.. at from 6 per cent. to 6¼ per cent.
371,896	..	.. at from 6½ per cent. to 6¾ per cent.
599,542	..	.. at from 7 per cent. to 7½ per cent.
111,651	..	.. at 7½ per cent.
382,348	..	.. at 8 per cent.
173,416	..	.. in small sums, at rates above 8 per cent.
853,801	..	.. at rates which are not specified.

£5,573,790

LIFE ASSURANCE.

At the close of the year 1909 the following life-assurance offices were represented in New Zealand:—

The Australian Temperance and General Mutual Life Assurance Society (Limited).

The Australian Mutual Provident Society.
 The Australian Widows' Fund Life Assurance Society (Limited).
 The Colonial Mutual Life Assurance Society (Limited).
 The Equitable Life Assurance Society of the United States.
 The Mutual Life and Citizens' Assurance Company (Limited).
 The National Mutual Life Association of Australasia (Limited).
 The New York Life Insurance Company.
 The Norwich Union Life Insurance Company.
 The Yorkshire Insurance Company.
 The Life Insurance Department of the New Zealand Government.
 The Provident Life Assurance Company.

The New Zealand Government and the Provident are the only purely New Zealand institutions, six of the societies having their head offices in Australia, two in England, and two in the United States of America. One office, the Equitable of the United States, has ceased to issue policies in the Dominion. During the year 1910 an amalgamation of the Mutual Life and Citizens' Company and the Australian Widows' Fund Society had been arranged whereby the latter becomes absorbed in the former.

Three of the Australian offices transact both ordinary life and industrial business, while the Provident of New Zealand confines its operations solely to the latter. The Mutual Life and Citizens' Company and the New Zealand Government Office have branches for assurance against accident.

The following table shows the total ordinary life-assurance business in force in the Dominion at the end of each of the ten years from 1900 to 1909 :—

ORDINARY LIFE ASSURANCE.—NEW ZEALAND BUSINESS, 1900-9.

Year.				Number of Policies in Force, including Annuities.	Amount insured.	Annuities per Annum.	Annual Premium Income, including Annuities.
					£	£	£
1900	..	..	..	89,849	22,629,255	33,566	709,100
1901	..	..	..	94,429	23,567,427	38,988	743,709
1902	..	..	..	99,908	24,697,807	45,668	789,925
1903	..	..	..	104,982	25,878,909	49,080	832,851
1904	..	..	..	110,227	27,074,171	54,835	873,588
1905	..	..	..	114,553	28,087,349	60,583	908,349
1906	..	..	..	118,265	29,036,047	65,754	935,068
1907	..	..	..	122,924	30,207,134	71,291	970,216
1908	..	..	..	127,721	31,447,101	32,759	1,005,984
1909	..	..	..	133,558	32,629,734	34,369	1,040,303

Similar information to the above is given respecting the industrial business of the companies operating in New Zealand.

INDUSTRIAL ASSURANCE.—NEW ZEALAND BUSINESS, 1900-9.

Year.	Number of Policies in Force, including Annuities.	Amount insured.	Annuities per Annum.	Annual Premium Income, including Annuities.
		£	£	£
1900	24,562	544,116	..	24,843
1901	26,111	570,792	..	26,743
1902	27,418	632,378	..	30,081
1903	30,714	756,051	..	36,250
1904	34,364	851,688	..	42,367
1905	36,502	877,871	..	46,096
1906	40,613	981,086	..	53,382
1907	43,889	1,053,874	..	59,258
1908	49,435	1,188,920	868	69,822
1909	56,269	1,366,985	..	81,999

The increase in number of ordinary life policies issued during the ten years was 49 per cent., and in the industrial business the number of policies increased 129 per cent. in the period. Taking both classes of life assurance together the policies increased in number by 66 per cent. in the decennium, as compared with an increase in the total population of 27 per cent. during the same period. A statement of the income and outgo of all the companies operating in the Dominion further illustrates the large increase in the business for the ten years.

ORDINARY LIFE ASSURANCE.—NEW ZEALAND BUSINESS.—INCOME AND OUTGO.

Year.	Receipts and Expenditure.			Expenses of Management.		
	Total Receipts, excluding Transfers.	Total Expenditure, excluding Transfers.	Excess of Receipts.	Total.	Proportion to Premium Receipts.	Proportion to Gross Receipts.
	£	£	£	£	Per Cent.	Per Cent.
1900 ..	1,034,561	608,469	426,092	131,389	19·00	12·70
1901 ..	1,094,062	710,389	383,673	139,416	19·15	12·74
1902 ..	1,159,457	733,339	426,118	151,414	19·60	13·06
1903 ..	1,191,779	765,736	426,043	164,735	20·14	13·82
1904 ..	1,263,257	755,038	508,219	163,081	18·96	12·91
1905 ..	1,329,378	789,906	539,472	168,389	18·78	12·67
1906 ..	1,382,262	846,218	536,044	165,967	18·02	12·01
1907 ..	1,427,033	866,789	560,244	160,808	16·84	11·27
1908 ..	1,488,975	933,066	555,909	167,188	16·77	11·23
1909 ..	1,556,282	970,808	585,474	172,325	16·83	11·07

The general expense rate shows the decrease which might be expected to accompany the growing volume of the business, and in the premium expense rate there is even a more marked decline.

Results under similar headings are given in the next table for industrial assurance.

INDUSTRIAL ASSURANCE.—NEW ZEALAND BUSINESS.—INCOME AND OUTGO.

Year.	Receipts and Expenditure.			Expenses of Management.		
	Total Receipts, excluding Transfers.	Total Expenditure excluding Transfers.	Excess of Receipts.	Total.	Proportion to Premium Receipts.	Proportion to Gross Receipts.
	£	£	£	£	Per Cent.	Per Cent.
1900 ..	23,454	15,831	7,623	13,043	60·99	55·61
1901 ..	26,046	19,198	6,848	15,662	65·44	60·13
1902 ..	26,872	19,796	7,076	15,325	59·38	57·03
1903 ..	32,177	25,675	6,502	19,547	63·85	60·75
1904 ..	38,289	27,455	10,834	21,021	58·06	54·90
1905 ..	44,385	30,908	13,477	22,676	56·15	51·09
1906 ..	49,146	34,850	14,296	26,904	58·41	54·74
1907 ..	55,461	37,379	18,082	28,903	54·21	52·11
1908 ..	77,894	46,734	31,160	34,455	56·28	44·23
1909 ..	76,763	55,185	21,578	40,121	55·57	52·26

This class of business has only recently attained any magnitude in the Dominion. The expense rate is exceedingly high, as is common with industrial assurance.

LIABILITIES AND ASSETS.

The New Zealand liabilities of all the institutions in respect of their ordinary life business at the end of 1909 were as follows:—

Life Assurance and annuity funds	£ 11,182,323
Depreciation, reserve, and other special funds	102,257
Other liabilities	105,077
Total	£11,389,657

At the same date the liabilities of the Provident Life Assurance Company and of the New Zealand industrial branches of the two Australian offices were:—

Capital and funds	£ 185,496
Other liabilities	1,217
Total	£186,713

The assets balance the liabilities in every case and are stated as follows :—

	Ordinary Assurance.	Industrial Assurance.
	£	£
Mortgages on property ..	6,296,573	56,928
Loans on policies..	1,881,304	1,916
Government securities ..	994,841	..
Other investments ..	1,252,745	10,783
Cash	148,485	3,766
Other assets ..	815,709	63,320
Total	£11,389,657	£136,713

ACCIDENT INSURANCE.

At the close of the year 1910 there were twenty-five insurance offices doing accident business in the Dominion. Returns of receipts and expenditure have been submitted by each office, excepting the Northern, and the figures are given in the next table. In most cases the returns cover the year ended 31st December, 1910. The table only relates to the accident business transacted by the various offices within the Dominion.

ACCIDENT INSURANCE IN NEW ZEALAND.—RECEIPTS AND EXPENDITURE, 1910.

Office.	Receipts.			Expenditure.		
	Premiums.	Other Receipts.	Total.	Claims.	Other Payments.	Total.
	£	s.	d.	£	s.	d.
Alliance ..	250	8	8	250	8	8
Australian Temperance and General ..	451	10	0	452	17	6
Colonial Mutual ..	869	15	11	954	2	9
Commercial Union ..	13,676	11	8	13,676	11	8
Farmers' Co-operative ..	1,027	18	4	1,079	18	4
Guardian ..	1,927	12	6	1,927	12	6
Liverpool and London and Globe ..	2,312	4	3	2,312	4	3
London and Lancashire ..	4,946	3	5	5,271	0	11
Mutual Life and Citizens ..	5,676	0	6	5,676	0	6
National ..	7,384	19	5	7,384	19	5
New Zealand ..	70,805	0	0	70,805	0	0
Norwich and London ..	8,992	7	3	9,352	7	3
Ocean ..	31,592	17	0	31,592	17	0
Pacific ..	3,539	1	7	3,539	1	7
Queensland ..	5,325	7	11	5,325	7	11
Royal ..	9,476	2	3	9,476	2	3
Royal Exchange ..	2,355	6	2	2,355	6	2
South British ..	35,015	16	1	35,015	16	1
Standard ..	9,523	3	6	9,523	3	6
Union ..	1,793	19	7	1,793	19	7
United ..	1,283	10	1	1,283	10	1
Victoria ..	781	15	3	781	15	3
Yorkshire ..	1,083	19	11	1,083	19	11
Insurance Department of the New Zealand Government ..	21,363	10	6	23,907	6	5
Totals..	241,507	1	9	245,221	9	6
		3,714	7	115,989	3	11
				88,394	3	9
				204,933	7	8

GOVERNMENT ACCIDENT INSURANCE.

The Accident Branch of the Government Insurance Department was opened in 1901. General accident business is undertaken, but the branch was opened more especially with a view to relieve employers of labour of the liability imposed upon them by the Workers' Compensation for Accidents Act, 1900. This Act greatly extended the liability of employers, and gave to a workman the right of compensation for all injuries arising out of, and in the course of, his employment, not attributable to his own serious and wilful misconduct.

This liability has been more or less extended by subsequent Acts, and under the Workers' Compensation Act, 1908, which came into operation on the 1st January, 1909, the scale of compensation is as follows:—

- (a.) Where death results from the injury and the workman leaves dependants wholly dependent upon his earnings, the compensation is one hundred and fifty-six times his average weekly earnings, but not to be less than £200, nor to exceed £500.
- (b.) If the dependants are only partially dependent upon the workman's earnings, the compensation is to be three times the value of the benefits they have received from the deceased worker during the previous twelve months, but not exceeding the amount payable under paragraph (a).
- (c.) In either of the above cases the employer is also liable for medical and burial expenses not exceeding £20, and an amount not exceeding this sum can be claimed where there are no dependants.
- (d.) Where a workman is totally incapacitated for work, he is entitled to a weekly payment of one-half his average weekly earnings, but the weekly compensation is not to be less than £1 in cases where the worker's earnings at the time of the accident are not less than 30s. per week, nor can the weekly payment exceed £2 10s., as any worker whose earnings are more than £5 per week is excluded from the benefits of the Act.
- (e.) Where the workman is partially incapacitated only, the compensation is one-half the loss of wages.

The compensation is payable from the date of the accident where the incapacity lasts for fourteen days or more, but if the duration of the incapacity is less than fourteen days, no payment is made for the first week.

Weekly payments are not to extend over a longer period than six years, and the aggregate amount is not to exceed £500.

Special provision is made in the case of wharf labourers, and also for increased compensation to persons under the age of twenty-one, who are permanently incapacitated.

Certain diseases due to the nature of the trade, such as anthrax, lead poisoning, mercury poisoning, &c., are regarded as accidents.

If the accident occurs in the course of employment in or about a mine, building, factory, or ship, the compensation becomes a charge on the employer's interest in the property. In nearly all cases this charge takes precedence of all existing or subsequent charges or encumbrances howsoever created.

The Department's policies cover the full liability of an employer to his workmen under the Workers' Compensation Act, and the liability under common law to the extent of £500 per man.

The premiums are assessed on the wages, and vary from 3s. 6d. and 4s. 6d. per £100 of wages for the lightest occupations to 13s. 6d. per cent. for building trades, 49s. 6d. per cent. for coal-mines to cover accidents only, and 93s. 6d. per cent. for bushfelling.

Policies protecting mortgagees from loss through the charge of an injured workman taking precedence of a mortgage are issued at premiums varying from 1s. per cent. of the mortgage for small mortgages to 6d. per cent. for large mortgages.

Personal-accident policies are also issued securing amounts for accidental death and permanent total or partial disablement, and weekly allowances during temporary disablement.

The premium income and claims of the Accident Branch since the commencement of business have been as follows:—

Year.	Premium Income.	Claims.
	£	£
7th June to 31st December, 1901	11,856	2,428
Year ending 31st December, 1902	14,100	7,364
Year ending 31st December, 1903	24,381	13,230
Year ending 31st December, 1904	23,768	12,105
Year ending 31st December, 1905	23,970	11,242
Year ending 31st December, 1906	20,815	13,720
Year ending 31st December, 1907	21,477	11,288
Year ending 31st December, 1908	20,898	11,926
Year ending 31st December, 1909	26,337	12,805
Year ending 31st December, 1910	21,364	12,522

The funds, assets, and liabilities of the Government Insurance Department belonging to its Accident Insurance Branch are kept separate and distinct from the main life-insurance business, and powers are vested in the Governor to make regulations in regard to tables fixing rates of premium and other details for the conduct of the Accident Insurance Branch. The assets and liabilities on 31st December, 1910, were as follows:—

<i>Liabilities.</i>			<i>Assets.</i>		
	£	s. d.		£	s. d.
Accident Funds as per Revenue Account ...	11,029	9 0	Mortgages on property	52,165	0 0
Claims admitted (proofs not yet completed) ...	11,560	0 0	Overdue interest ... Nil		
Commission ...	146	11 3	Outstanding in earnest due but not overdue ...	52	16 3
Premium and other deposits	35	1 2	Interest accrued but not due ...	700	7 1
Reserve for unearned premiums ...	11,852	0 0			
Investment Fluctuation Reserve ...	1,000	0 0	Agents' balances ...	753	3
Reserve Fund constituted under section 20 of the Government Accident Insurance Act, 1908 ...	21,785	0 11	Sundry accounts owing ...	271	4 7
	£57,348	2 4	Cash in hand and on current account ...	3,925	12
				£57,348	2 4

FIRE INSURANCE.

There were twenty-nine companies carrying on the business of fire insurance in the Dominion at the end of the year 1910, seven of the offices being New Zealand institutions. Following is a list of the names of the companies :—

Alliance Assurance Company (Limited).
 Australian Alliance Assurance Company.
 Atlas Assurance Company (Limited).
 Commercial Fire and Marine Insurance Company.
 Commercial Union Assurance Company (Limited).
 Farmers' Co-operative Fire and Marine Insurance Association of New Zealand (Limited).
 Guardian Assurance Company (Limited).
 Liverpool and London and Globe Insurance Company.
 London and Lancashire Fire Insurance Company.
 National Insurance Company of New Zealand (Limited).
 New Zealand Insurance Company.
 Northern Assurance Company (Limited).
 North British and Mercantile Insurance Company.
 Norwich Union Fire Insurance Society (Limited).
 Ocean Accident and Guarantee Corporation (Limited).
 Oceanic Fire and Marine Insurance Company.
 Phoenix Assurance Company (Limited).
 Queensland Insurance Company (Limited).
 Royal Exchange Assurance Corporation of London.
 Royal Insurance Company (Limited).
 South British Insurance Company (Limited).
 Standard Fire and Marine Insurance Company of New Zealand (Limited).
 State Fire Insurance Office.
 Sun Insurance Office.
 Union Assurance Society of London (Limited).
 United Insurance Company (Limited).
 Victoria Insurance Company (Limited).
 Yorkshire Insurance Company (Limited).
 Zealandia Fire and Marine Insurance Company.

STATE FIRE INSURANCE.

In the year 1903 an Act was passed "to establish a State Fire Insurance Office and to make other provisions for the insurance and protection of insurable property in New Zealand against loss or damage by fire."

The statute provides for the establishment of an office to be administered by a General Manager appointed by the Governor, and for the necessary staff—not subject to the laws regulating the Civil Service.

There is provision for the constitution of a Board, to consist of the Minister of Finance, the General Manager, the Government Insurance Commissioner, and two other persons (not being in the Civil Service) appointed by the Governor. The latter hold office for two years, with eligibility for reappointment, and are to be remunerated according to appropriation by Parliament.

In order to provide capital for the business, the Minister of Finance, on being authorized by the Governor in Council, is empowered to raise from time to time such sums as he thinks fit, not exceeding in the whole £100,000, any of which may, if found convenient, be raised in New Zealand.

In the event of such capital not being found sufficient, the Minister of Finance, on being authorized by the Government, is empowered to raise additional capital as required. To enable this to be done the General Manager must, if the Board approves, apply to the Minister for supplementary capital (not exceeding £20,000 at a time) to carry on business until the pleasure of Parliament is signified.

The rate of interest on debentures, scrip, or other security issued in respect of any sum raised under the Act may not be higher than $4\frac{1}{2}$ per cent.

For purposes of sinking fund, it is provided that at the expiration of every triennial period during the currency of securities the General Manager shall pay over to the Public Trustee one-half the net profits to the credit of a State Fire Insurance Sinking Fund Account. As soon as the Minister is satisfied that the accumulations of sinking fund will suffice to redeem the securities at maturity he is to notify the Public Trustee and the General Manager, whereupon the payments of sinking fund cease, and subsequent accretions of interest are paid into Reserve Fund.

All moneys payable to the General Manager are to be paid to the credit of the State Fire Insurance Account, out of which shall be payable, without further appropriation than the Act under notice, all costs and expenses, salaries, fire losses, and other outgoings of the business—including interest payable on securities issued.

Provision is made for the General Manager, with consent of the Board, to buy, sell, or lease land, with or without buildings for the purposes of the office.

On the 4th January, 1905, the State Fire Insurance Office opened for public business, and at the end of that year the public support accorded resulted in insurances therein to the extent of £3,000,000. At the end of the year 1910 the gross amount at risk had increased to £10,029,920.

The office commenced business with premiums 10 per cent. less than the then current rates obtaining, and a little later a further reduction took place in the rates on dwellings and similar risks, which were lowered by $33\frac{1}{3}$ per cent.

The premium income after deducting premiums on reinsurances during the six years 1905-10 was as follows:—

Year.	Amount of Premium Income.					
						£
1905	..	..	..	..	..	13,128
1906	..	..	..	..	..	20,962
1907	..	..	..	..	..	23,195
1908	..	..	..	..	..	26,657
1909	..	..	..	..	..	33,281
1910	..	..	..	..	..	40,551

The premium rates have remained unaltered during the above years. Only £2,000 of the authorized capital has been raised, and the office has the sum of £20,000 invested in Government securities

FOREIGN INSURANCE COMPANIES.

Every foreign company—*i.e.*, a company registered or established out of New Zealand, and including a local company whose chief office is situate out of the Dominion—which proposes to commence in New Zealand the business of life insurance, whether conjointly or not with any other class of business, must deposit with the Public Trustee a sum of not less than £5,000 nor more than £50,000 in cash or approved securities. The amount of deposit is calculated on the total amount assured by current policies at the rate of £5,000 deposit for every £100,000 assured until the maximum deposit is reached.

A foreign company proposing to carry on fire and marine insurance business in the Dominion must first obtain from the Public Trustee a certificate in the form prescribed authorizing the company to transact its business for a period of twelve months from the date of the certificate. The certificate is renewable annually provided the Public Trustee is satisfied that the company is financially sound.

Accident insurance or insurance business of any class not previously mentioned may be transacted in New Zealand by a foreign company, provided the company deposit with the Public Trustee the sum of £10,000 in cash or approved securities. If the company carries on a life-assurance business as well as accident insurance the last mentioned deposit must be made in addition to that described in the first paragraph.

All cash deposited with the Public Trustee as deposit shall bear interest, which is payable to the company making the deposit.

THE PUBLIC TRUST OFFICE OF NEW ZEALAND.

Functions.

THE Public Trust Office is established by Act of the New Zealand Parliament, with very wide and extensive powers and functions.

The Public Trustee discharges all the duties that may, by will or deed, be imposed upon a private executor, trustee, attorney, or agent.

He may be appointed by will executor. Any one desirous of nominating an attorney to execute documents, manage property, collect rents during the absence of the owner, &c., can appoint the Public Trustee, instead of a private individual, to do these things.

Where there is no will the next-of-kin of deceased instead of taking out letters of administration may appoint the Public Trustee to do so.

Where there is a will the executor named therein may get the Public Trustee to take his place. Those who have had any experience of the worries and difficulties incidental to such matters will appreciate the convenience of having the whole of the work done by a public office, the fidelity of which is guaranteed by the State. Its large experience in such business enables the office to do the work without any trouble to the person for whom it is acting.

When the Public Trustee acts no law costs are incurred in proving the will, or obtaining letters of administration and passing the stamp accounts.

The estates of lunatics are by statute placed in the Public Trust Office where no committee is appointed. Where the estate is of a complicated nature, an expert may be appointed by the Supreme Court to assist the Public Trustee in dealing with it.

State Guarantee against Loss.

Not the least of the many advantages offered by the Office is an absolute security against loss. If an estate is left to be looked after by a private trustee it may be mismanaged or dishonestly administered, and if there is a loss the widow or children suffer. On the other hand, if the Public Trustee is appointed trustee and the investment of the funds is left to his discretion, every penny of the capital and interest is safe, as the State guarantees this by statute. Trust-moneys are invested in securities fixed by law, and they bear interest from the time of coming into the Office. There is thus no loss of interest through delays in investment, as often happens when private trustees are acting.

Special Powers of the Public Trustee.

The formalities required by Courts in the case of private trustees, which are necessary for the protection of estates, and also of the interests of creditors, are largely dispensed with when the Public Trustee is acting. Being a public officer, whose integrity is guaranteed by statute, these restrictions would be superfluous.

His powers are also much larger than those of other trustees, and in his discretion he may do many things that would require in the case of others a Court order. This is particularly the case when there is a widow and children whose interests have to be looked after, or where, for the purposes of improving or protecting the estate, property has to be sold, mortgaged, or exchanged.

The absence of formalities, and the power to do many things without orders of Court, save considerable expense and much delay.

In private trusteeships, death and absence render necessary numerous and expensive deeds which are not required when the Public Trustee is acting. Moreover the Office Solicitor's advice is always available *without expense* to the estates.

By all who know or have experienced the contingencies and expenses of private trusteeships these advantages must be appreciated.

Draft Wills and Deeds.

The draft of any will, deed of settlement, or power of attorney appointing the Public Trustee executor, &c., is examined by the Office Solicitor *free of charge*.

Office Charges.

The fees charged by the office are fixed by regulations. Any one before placing his estate in the office may ascertain from the Public Trustee, or any of his agents, exactly what it will cost. No charge whatever is made for correspondence, consultations, &c., no matter how complicated the matter dealt with may be. The charges are not made with a view to profit, but to insure the office against loss in the expenses of working. As the business increases these fees will be reduced. The charges are,—

- (a.) Upon the gross capital of any estate (other than that of an intestate or a lunatic) realized by the Public Trustee,—
- | | |
|-------------------------------------|---------------|
| On any sum up to £10,000 | £2½ per cent. |
| On all in excess of £10,000 | £1½ per cent. |
- (b.) Upon such of the capital of any estate realized by a former executor, trustee, or administrator, or person acting in a fiduciary character, as becomes vested in the Public Trustee £1 per cent.
- Provided that such charge shall be payable by the beneficiaries at the period of distribution.
- Minimum charge under (a) and (b) £1
- (c.) Where money is the subject of a deed of trust or of a settlement, ante-nuptial or otherwise, then upon such money being distributed among the beneficiaries (not being the settlor, his executors, administrators, or assigns), on their becoming absolutely entitled thereto in possession, the only charge shall be £1 per cent.
- (d.) Upon the gross capital of any estate in which the Public Trustee is acting as attorney or agent, the charge shall be as arranged between the Public Trustee and his principal, with the consent of the Board.

(e.) Upon the gross capital of intestate or lunatics' estate realized by the Public Trustee,—

On any sum up to £250	£5 per cent.
On the next £9,750	£2½ per cent.
On all over £10,000	£1½ per cent.

Provided that with respect to all assets consisting of cash, or of balances to credit of any current accounts in any institution, or with respect to any fixed deposits in any institution, or with respect to moneys received under any policy of life or accident assurance, or mortgages, bonds, and debentures, and compensation-moneys received into an estate, under any Act, the charge shall be

Minimum charge under (c), (d), and (e)	10s.
--	------

(f.) Upon the gross income of any estate or agency, realized or unrealized,—

On the first £2,000 per annum	£5 per cent.
On all over £2,000 per annum	£2½ per cent.

Provided that on all interest from debentures and dividends from shares the charge shall only be

(g.) Upon unrealized real or personal property (not being money) transferred or delivered in kind to any person entitled thereto, being a devisee, legatee, next of kin, *cestui que trust*, beneficiary, or other person of a like character, but not including a person entitled as principal under any power of attorney or agency, upon the value of such property as fixed by the Public Trustee,—

Up to £10,000	£1½ per cent.
On all in excess of £10,000	10s. per cent.
Minimum charge	£1.

Any of the foregoing charges may, in special cases, be reduced by the Public Trustee, and this is not infrequently done where the estates are small and the beneficiaries are widows and children.

Safe-deposits.

A safe-deposit system is established at the Head Office in Wellington, and will in course of time be extended to the Branch Offices in the other cities throughout the Dominion.

The advantages of this system are well recognized in Europe, America, and Australia, and there is no doubt but that the safe-deposits in the Public Trust Offices of New Zealand will prove a great convenience to those desiring to use them.

For an annual fee of from £1 to £5, a person can obtain the exclusive use of a specially built and self-contained steel safe.

To open the safe, two keys must be used—one is kept by the lessee, and the other, the master key, by the Office.

By this means a person can easily and cheaply provide himself with a place of absolute security for the deposit of debentures, deeds, documents of importance and value, articles of jewellery, &c., whilst having full and exclusive access to them himself.

General.

The Office makes and receives payment through the Post Office. This is a great convenience to clients, as payment can be made, free of any deduction for exchange, anywhere in the Dominion where there is a money-order post-office.

The Public Trustee has branches and agencies in different parts of the Dominion as per subjoined list, where full details of the working of the Office can be obtained.

Money to lend.

The office advances money on first mortgage of freehold lands (town or country), also on certain classes of Crown leaseholds, at lowest current rates of interest, with liberal terms for repayment of principal.

Growth of the Office.

The following table shows, for each of the years named, the number of estates in the office, and the amount of the invested funds:—

Year.	Wills and Trusts including Sinking Funds.		Intestate Estates.		Lunatic Estates.		Funds invested.
	No.	Value. £	No.	Value. £	No.	Value. £	£
1896	447	673,478	812	86,132	434	73,995	757,573
1897	466	744,742	781	88,751	510	88,133	841,974
1898	493	789,162	797	97,140	558	85,890	912,971
1899	538	865,446	821	133,409	507	111,793	942,641
1900	576	933,567	903	136,697	555	113,525	1,028,988
1901	684	1,022,838	867	134,820	626	159,087	1,618,379
1902	651	1,122,404	923	163,304	728	163,306	1,723,450
1903	744	1,279,743	989	197,363	802	170,585	1,861,308
1904	836	1,605,143	1,062	232,695	854	208,573	1,595,330
1905	955	1,922,303	1,070	277,779	940	256,645	1,813,709
1906	1,091	2,252,813	1,092	318,490	1,031	280,402	1,851,396
1907	1,240	2,608,942	1,164	343,376	1,032	284,004	2,117,924
1908	1,564	2,974,053	1,270	353,760	1,037	323,542	2,444,712
1909	1,602	3,670,614	1,389	370,484	1,123	364,985	2,834,370
1910	1,831	4,242,601	1,558	397,640	1,238	395,642	3,196,138
1911	1,953	4,968,357	1,788	385,090	1,422	429,958	4,128,222

The capital funds of the Public Trust Office invested amounted, on the 31st March, 1911, to £3,990,946. The investments are as follows:—

				£
New Zealand Government securities	..	..	..	340,468
Local bodies' debentures	..	..	..	237,549
Mortgages of freehold property	..	..	..	5,353,210
Freehold property	..	..	..	59,719
Total	..	..	..	£3,990,946

BRANCHES AND AGENCIES OF THE PUBLIC TRUST OFFICE.

NORTH ISLAND.

Branches.

Auckland	..	..	District Manager	..	E. F. Warren.
Napier	..	..	"	..	K. N. H. Browne.
New Plymouth and Hawera	..	..	"	..	C. Zachariah.
Wanganui	..	..	"	..	T. R. Snywell.
Wellington	..	..	"	..	T. D. Kendall

Agencies.

	Agent	
Carterton	J. Laurenson.	
Dannevirke	W. Rose.	
Gisborne	H. W. Jackson.	
Hamilton	J. S. Bond.	
Kawhia	J. K. Newton.	
Masterton	W. B. Chennells.	
Northern Wairoa, Aratapu	T. C. French.	
Opotiki	Chief Police Officer.	
Pahiatua	G. C. Müller.	
Palmerston North	W. Rutherford.	
Raurimu	Chief Police Officer.	
Rawene	Chief Police Officer.	
Rotorua	L. C. Ryan.	
Taihape	J. P. Aldridge.	
Tauranga	A. F. Tunks.	
Waihi	R. Gooch.	
Waipawa	E. J. O'Brien.	
Wairoa	W. F. Shaw.	
Whangarei	W. A. Carruth.	

SOUTH ISLAND.

Branches.

	District Manager	
Christchurch	M. C. Barnett.	
Dunedin	F. H. Morice.	
Greymouth	C. W. Cooke.	
Nelson	J. E. Allen.	

Agencies.

	Agent	
Akaroa	H. W. Wilkins.	
Alexandra South	C. E. Richards.	
Ashburton	A. A. Fooks.	
Balclutha	J. D. Stewart.	
Blenheim	J. White.	
Hokitika	W. Duncan.	
Invercargill	R. F. Cuthbertson.	
Kaikoura	Postmaster.	
Lawrence	A. McLean.	
Motueka	T. Boyes.	
Oamaru	A. W. Woodward.	
Queenstown	C. E. Gudgeon.	
Raefton	H. G. Hankin.	
Tapanui	W. Quin.	
Timaru	A. Montgomery.	
Westport	W. T. Slee.	

DISTRIBUTION OF WEALTH.

The estimation of private wealth, hitherto made on the basis of deceased persons' estates finally certified for duty, has this year been abandoned. The reason lies in the existence of certain defects in the basis of the calculation. Under the New Zealand law relating to death duties previous to 1910 all estates under £100 net value, and those passing from husband to widow or wife to widower, were exempt from taxation, and were excluded from the total value of estates passing at death.

An assumption that the average wealth possessed by the living is equal to that left by the dying is not altogether justifiable when no consideration is taken of age-constitution, and the average is applied to the total adult population, regardless of the fact that the younger and more numerous section do not possess the same amount of accumulated wealth as those at the more mature ages. The material requisite for the adoption of a method which will include these factors is being collected.

The number and value of estates finally certified for taxation during the eighteen years 1893-1910 is given below, but the table must be regarded as subject to the defects mentioned above.

Category.				Number of Estates, 1893-1910.	Aggregate Net Value on which Duty was paid.
£				No.	£
Under	500	..	..	12,701	2,663,665
£500 and under	1,000	..	..	4,108	2,930,671
£1,000	2,000	..	..	3,046	4,297,960
£2,000	3,000	..	..	1,288	3,148,872
£3,000	4,000	..	..	749	2,592,505
£4,000	5,000	..	..	477	2,137,133
£5,000	7,500	..	..	647	3,952,483
£7,500	10,000	..	..	374	3,213,223
£10,000	15,000	..	..	340	4,145,458
£15,000	20,000	..	..	187	3,240,415
£20,000 and over	..	..	..	386	20,875,664
Totals				24,303	53,198,049

PUBLIC PROPERTY.

The value of public lands and improvements thereon, including public buildings, but excluding lessees' interests, as shown in the table following is that returned by the Valuer-General. Government Railways and other public works are taken at cost.

VALUE OF PUBLIC PROPERTY.

Public property—i.e., land and improvements not owned by individuals (1907-8, latest information available), exclusive of Government railways:—

	£	£
Crown lands	21,511,653	
Local authorities' lands	7,163,722	
Educational lands	5,038,615	
Church and other lands	3,555,271	
		37,269,261
Government railways open and under construction, 31st March, 1911		31,509,960
Other public works—viz., telegraphs, lighthouses, harbours, and water-supply on goldfields		5,750,000
Total public property		£74,529,221

In addition to the items enumerated above there must be taken into account the value of such public undertakings by local authorities as water-supply, lighting and power, tramways, and harbours. Excluding buildings, these works, apart from streets, footways or bridges, have cost approximately £8,800,000.

NATIVE PROPERTY.

The value of Native lands and improvements, exclusive of the value of lessees' interests, on 31st March, 1908, was £11,413,545. The area possessed by or reserved for the use of Natives is approximately 7,400,000 acres, some portion of which is under lease to Europeans, the rentals being paid to the Native owners.

PRODUCTION.

The value of the total production of New Zealand has been estimated for the year 1907-8, and the result is given. In regard to the last item, the amount has been arrived at by an indirect though recognized method, but it may be regarded as an approximation.

					1907-8. £
Agricultural and pastoral produce	..	..	..	..	23,808,159
Mining produce	..	..	..	..	8,775,835
Manufactures	..	..	..	..	7,240,913
Miscellaneous (including fisheries and forestry)	..	..	..	..	1,766,815
					£36,591,722
Value of building trade, industries not included in manufactories, and general labour (1905-6)	..	..	..	..	6,838,380
Total	..	..	..	..	£43,430,102

WAGES AND PRICES.

The following tables show the average rates of wages ruling during the year 1910 at the chief centres of population in each provincial district, and the average prices of the principal articles of food and drink at the same localities for the same period. The figures are taken from returns furnished by police officers, the information being collected at the end of the year.

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1910.

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
1. AGRICULTURAL LABOUR.									
Farm labourers:									
With board, per week ..	20/ to 30/	25/ to 30/	22/6 to 30/	20/ to 30/	20/ to 30/	15/ to 25/	25/	20/ to 30/	20/ to 30/
Without board, per day ..	7/ to 10/	6/ to 8/	7/6 to 8/	7/ to 8/	7/ to 9/	..	8/	8/ to 9/	6/ to 8/
Ploughmen:									
With board, per week ..	25/ to 30/	30/ to 35/	25/ to 30/	25/ to 30/	25/ to 30/	25/ to 30/	25/ to 30/	22/6 to 35/	22/6 to 30/
Without board, per day ..	8/ to 10/	8/ to 10/	8/	7/ to 10/	7/ to 8/	..	8/	..	9/
Harvesters:									
With board, per week ..	30/ to 35/	60/	40/ to 45/	30/ to 40/	40/	..	..	40/ to 50/	30/ to 50/
Without board, per hour ..	1/	1/3	1/	1/	10d. to 1/3	1/ to 1/3	..	1/ to 1/3	10d to 1/2
Men cooks on farms:									
With board, per week ..	20/ to 30/	20/ to 30/	25/ to 30/	20/ to 40/	20/ to 30/	30/	30/ to 35/	20/ to 40/	20/ to 40/
Female farm servants:	10/ to 20/	10/ to 17/6	15/ to 20/	12/6 to 25/	12/ to 20/	15/	15/ to 17/	15/ to 18/	12/ to 20/
With board, per week ..	10/ to 20/	10/ to 17/6	15/ to 20/	12/6 to 25/	12/ to 20/	15/	15/ to 17/	15/ to 18/	12/ to 20/
2. PASTORAL LABOUR.									
Shepherds, with board, per annum ..	£70 to £90	£52 to £80	£70 to £78	£65 to £85	£65 to £85	£52 to £75	£78	£65 to £80	£50 to £80
Stock-keepers, with board, per annum ..	£52 to £78	£65 to £80	£65 to £90	£65 to £78	£80	£52 to £65	£78	£65 to £80	£50 to £80
Station labourers:									
With board, per week ..	20/ to 25/	25/	25/ to 30/	20/ to 25/	20/ to 30/	15/ to 20/	20/ to 25/	20/ to 25/	20/ to 30/
Shearers, with board, per 100 sheep shorn	18/ to 20/	20/ to 25/	20/ to 22/	20/	20/	20/	20/	20/	18/ to 20/
Men cooks on stations, with board, per week	20/ to 30/	20/ to 30/	30/ to 35/	20/ to 40/	25/ to 30/	30/	35/ to 40/	25/ to 40/	20/ to 40/
3. ARTISAN LABOUR (per day, without board).									
Masons ..	12/	10/	19/6 to 14/	12/ to 14/	12/6 to 14/	10/ to 14/	12/ to 14/	12/ to 14/	11/ to 14/
Plasterers ..	12/ to 14/	10/ to 12/	18/6 to 15/	12/ to 14/	12/6 to 14/	18/ to 14/	12/ to 14/	12/ to 14/	11/ to 15/
Bricklayers ..	12/ to 14/	10/ to 12/	12/ to 14/	12/ to 14/	12/ to 14/	12/ to 14/	12/	12/	12/ to 14/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1910—continued.

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
3. ARTISAN LABOUR (per day, without board)—continued.									
Cabinetmakers	9/ to 12/	10/	10/ to 12/	10/ to 11/	10/	8/ to 9/	12/	10/	9/ to 12/
Carpenters	10/4 to 12/	11/	10/ to 12/	10/ to 11/	10/ to 13/	10/ to 11/	11/ to 13/4	10/8 to 12/	10/ to 12/
Boilermakers	10/6 to 12/	10/	11/8	10/ to 11/	10/	10/ to 11/	10/ to 11/	11/	10/ to 11/4
Blacksmiths	9/ to 10/	9/ to 11/	10/	10/	10/ to 12/	9/2 to 11/	10/ to 13/4	10/	8/ to 12/
Tinsmiths	8/6 to 10/	10/	10/ to 10/8	9/ to 11/	10/	10/	10/ to 12/	8/6 to 10/	9/ to 10/
Wheelwrights	9/ to 11/	10/ to 11/	10/ to 11/	10/	10/ to 12/	9/ to 12/	10/ to 12/	10/ to 11/	9/ to 12/
Shipwrights	10/	..	10/	10/	11/	13/	10/ to 12/	10/	10/
Plumbers	9/6 to 11/4	10/ to 11/	10/ to 12/	10/ to 12/	10/ to 12/	10/	10/ to 12/	9/ to 10/8	9/ to 12/
Painters	10/	10/ to 11/	10/	10/	9/ to 10/	9/ to 10/	10/ to 12/	10/	9/ to 11/
Saddlers	8/ to 10/	8/ to 10/	8/ to 9/4	8/ to 10/	8/ to 9/	9/ to 9/2	10/	8/ to 10/	8/ to 9/
Shoemakers	8/ to 9/	7/6 to 10/	8/ to 9/	8/ to 10/	8/ to 10/	8/ to 10/	8/4 to 9/	7/6 to 10/	8/ to 10/
Coopers	9/2	10/	10/	10/	..	9/2 to 11/	12/	8/4 to 10/	8/6 to 10/
Watchmakers	8/4 to 10/	10/ to 14/	10/ to 11/6	9/ to 10/	10/	10/	10/ to 13/4	8/4 to 13/4	8/ to 11/
4. SERVANTS.									
Married couples without family, with board, per annum	£70 to £90	£75 to £90	£90 to £100	£70 to £100	£90 to £100	£75 to £80	£100	£75 to £100	£70 to £90
Married couples with family, with board, per annum	£60 to £80	£70 to £90	£72 to £100	£65 to £100	£75 to £95	..	£30 to £100	£65 to £85	£60 to £90
Grooms, with board, per week	20/ to 25/	20/	25/	25/ to 30/	20/ to 30/	20/	20/ to 25/	25/	20/ to 30/
Gardeners:									
With board, per week	20/ to 25/	20/	25/ to 30/	20/ to 30/	20/ to 30/	20/	20/ to 30/	25/ to 32/	20/ to 37/6
Without board, per day	7/ to 8/	..	8/ to 9/	8/ to 9/	8/	..	8/	7/ to 8/	7/6 to 9/
Cooks, with board, per week	20/ to 60/	17/6 to 25/	20/ to 25/	20/ to 40/	20/ to 30/	25/	25/ to 30/	22/6 to 40/	20/ to 50/
Laundresses, with board, per week	20/ to 30/	25/	20/ to 25/	15/ to 25/	17/6 to 20/	20/	20/ to 30/	15/ to 25/	15/ to 30/
General house servants, with board, per week	12/ to 20/	10/ to 17/6	15/ to 20/	12/ to 25/	15/ to 20/	12/6 to 20/	15/ to 20/	12/ to 20/	10/ to 20/
Housemaids, with board, per week	12/ to 20/	10/ to 17/6	15/ to 20/	12/ to 20/	15/ to 20/	15/ to 20/	15/ to 20/	12/ to 20/	10/ to 20/
Nursemaids, with board, per week	8/ to 10/	8/ to 12/	9/ to 15/	8/ to 15/	10/ to 12/6	5/ to 12/6	10/ to 15/	10/ to 12/6	5/ to 15/6

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1910—continued.

Description of Labour	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury	Otago (Part Goldfield).
4. SERVANTS—continued.									
Needlewomen:									
With board, per week	15/ to 20/	15/	20/	20/			20/ to 25/	15/ to 30/	12/6 to 30/
Without board, per day (lunch always provided)	..	3/ to 4/	5/ to 6/	3/6 to 6/	3/ to 5/	5/	3/6	4/ to 5/	4/ to 6/
5. MISCELLANEOUS.									
General labourers, without board, per day	8/ to 10/	8/ to 9/	8/ to 9/	8/ to 9/	8/	8/ to 10/	8/ to 10/	8/ to 9/	8/ to 10/
Stonebreakers, without board, per cubic yard	2/6 to 4/6	8/ to 4/6	4/6	8/ to 3/6	..	..	5/	2/9	3/6
Seamen, with board, per month	90/ to 140/	130/	160/ to 200/	140/	140/ to 170/	120/ to 180/	120/ to 200/	140/ to 160/	90/ to 170/
Miners, without board, per day	8/ to 10/	..	..	10/ to 12/	10/	9/ to 12/	8/ to 12/	..	8/ to 10/
Engine-drivers, " "	9/ to 10/	10/	9/ to 12/	8/4 to 10/	10/	10/ to 10/6	10/ to 13/4	9/ to 12/6	9/ to 10/
Tailors, " "	8/4 to 9/	8/4 to 10/	9/2 to 10/	9/2 to 10/	11/	8/4 to 10/	8/4 to 10/	9/2 to 10/	8/4 to 10/
Tailoresses, " "	25/ to 33/	20/ to 35/	30/ to 36/	25/ to 40/	17/ to 25/	20/ to 30/	20/ to 30/	25/ to 30/	27/6 to 40/
Dre-smakers, " "	21/ to 35/	20/ to 35/	30/ to 36/	20/ to 40/	25/ to 30/	17/6 to 25/	20/ to 25/	20/ to 30/	20/ to 40/
Muliners, " "	25/ to 40/	25/ to 40/	30/ to 60/	20/ to 55/	50/	45/ to 50/	20/ to 60/	20/ to 40/	20/ to 40/
Machinists (sewing), " "	20/ to 30/	20/ to 30/	17/6 to 36/	25/ to 30/	30/	30/	20/ to 30/	20/ to 35/	20/ to 30/
Storekeepers, " "	48/ to 60/	60/	48/ to 60/	48/ to 60/	50/ to 60/	40/ to 60/	48/ to 80/	60/ to 70/	45/ to 80/
assistants, " "	40/ to 48/	42/ to 50/	42/ to 50/	36/ to 50/	40/ to 60/	25/ to 60/	48/ to 60/	45/ to 50/	25/ to 60/
Drapers' assistants, " "	40/ to 60/	42/ to 60/	40/ to 60/	40/ to 60/	30/ to 60/	25/ to 60/	40/ to 60/	30/ to 50/	25/ to 70/
Grocers' assistants, " "	40/ to 60/	42/ to 60/	40/ to 60/	45/ to 60/	30/ to 60/	25/ to 60/	40/ to 60/	42/ to 50/	25/ to 60/
Butchers, " "	40/ to 60/	48/ to 60/	50/ to 60/	45/ to 60/	40/ to 60/	42/ to 60/	50/ to 60/	50/ to 60/	40/ to 60/
Bakers, " "	45/ to 60/	48/ to 60/	45/ to 60/	50/ to 60/	54/ to 50/	55/ to 60/	50/ to 60/	45/ to 60/	45/ to 60/
Storemen, " "	40/ to 50/	50/ to 60/	48/ to 60/	45/ to 60/	48/ to 50/	50/ to 60/	50/ to 60/	50/ to 60/	48/ to 60/
Compositors, " "	48/ to 60/	54/ to 60/	45/ to 80/	45/ to 80/	60/	50/ to 60/	50/ to 70/	57/ to 75/	40/ to 75/
Sawmill hands, " "	42/ to 60/	48/ to 54/	48/ to 66/	48/ to 60/	48/ to 60/	54/ to 66/	60/ to 72/	45/ to 55/	48/ to 66/
Flax-mill hands, " "	42/ to 60/	42/ to 54/	48/ to 54/	42/ to 60/	45/ to 60/	20/ to 60/	60/	48/	20/ to 54/

AVERAGE PRICES OF PRODUCE, LIVE-STOCK, PROVISIONS, ETC., IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1910.

Articles.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
I. AGRICULTURAL PRODUCE.									
Wheat .. per bushel (60 lb.)	3/6 to 5/9	4/ to 4/6	4/3 to 4/6	4/ to 5/	4/ to 4/6	4/6	4/6 to 5/6	3/2 to 3/8	3/3 to 6/
Barley .. per bushel (47 lb.)	3/3 to 6/	3/6 to 4/	3/ to 3/9	3/ to 4/6	3/ to 4/	3/ to 4/	4/6 to 4/9	2/4 to 3/9	2/9 to 4/6
Oats .. per bushel (40 lb.)	2/8 to 3/6	3/ to 3/6	3/ to 3/3	2/10 to 3/6	2/6 to 3/	3/3	2/9 to 3/	1/9 to 2/8	1/11 to 3/6
Maize .. per bushel (56 lb.)	3/3 to 6/	4/	3/ to 4/9	3/9 to 5/6	4/ to 6/	4/ to 5/	4/6 to 5/6	4/ to 5/6	3/
Bran .. per bushel (20 lb.)	1/ to 1/10	1/3 to 1/6	1/3 to 1/6	1/ to 1/9	1/ to 1/6	1/2 to 1/3	1/ to 1/6	1/ to 1/6	10d. to 2/6
Hay .. per ton	40/ to 80/	65/	50/ to 80/	60/ to 110/	60/ to 80/	80/ to 120/	90/ to 120/	65/ to 90/	50/ to 90/
II. FLOUR AND BREAD.									
Flour, wholesale .. per ton of 2,000 lb.	210/ to 240/	180/ to 191/6	200/ to 245/	180/ to 240/	185/ to 220/	190/ to 220/	195/ to 250/	170/ to 180/	180/ to 260/
Flour, retail .. per bag of 50 lb.	5/6 to 7/6	5/9 to 7/	5/9 to 6/3	5/ to 6/6	5/6 to 6/3	6/	6/3 to 6/9	5/6 to 6/	5/3 to 7/6
Bread .. per 4 lb. loaf	6d. to 8d.	7d. to 8d.	6d. to 8d.	6d. to 8d.	6d. to 7d.	7d. to 8d.	7d.	6d. to 7d.	6d. to 8d.
III. LIVE-STOCK AND MEAT.									
Horses, draught .. per head	£20 to £40	£30 to £35	£30 to £40	£25 to £45	£17 to £45	£25 to £35	£40 to £50	£22 to £45	£25 to £47
Horses, saddle and harness ..									
Cattle, fat .. per head	£8 to £25	£15 to £18	£10 to £25	£12 to £15	£10 to £25	£10 to £20	£15 to £25	£6 to £30	£10 to £30
Cattle, milch cows .. per head	120/ to 185/	160/ to 200/	125/ to 160/	140/ to 190/	140/ to 150/	160/	225/ to 240/	120/ to 240/	160/ to 250/
Sheep, fat .. per head	100/ to 200/	200/ to 240/	120/ to 200/	120/ to 190/	110/ to 160/	150/	130/ to 150/	100/ to 150/	100/ to 160/
Lambs, fat .. per head	15/ to 20/	18/ to 26/	12/6 to 15/	12/ to 16/	12/6 to 16/	15/ to 20/	20/ to 25/	14/ to 20/	17/6 to 25/
Butchers' meat:—	11/ to 15/	15/ to 18/6	11/ to 15/	12/6 to 13/	10/ to 12/6	11/ to 16/	12/ to 18/	12/ to 18/	12/ to 16/
Beef .. per lb.	3d. to 6d.	5d.	4d. to 6d.	4d. to 6d.	3d. to 5d.	6d.	5d. to 7d.	5d. to 7d.	3d. to 8d.
Mutton .. per lb.	3d. to 6d.	5d. to 6d.	3d. to 5d.	4d. to 5d.	3d. to 5d.	5d. to 6d.	6d. to 7d.	3d. to 5d.	3d. to 6d.
Veal .. per lb.	4d. to 7d.	4d. to 6d.	4d. to 5d.	4d. to 6d.	4d. to 6d.	5d. to 6d.	6d. to 7d.	4d. to 6d.	3d. to 7d.
Pork .. per lb.	6d.	6d.	6d. to 7d.	6d.	5d. to 6d.	6d. to 7d.	8d.	6d. to 8d.	6d. to 8d.
Lamb .. per lb.	5d. to 7d.	6d. to 9d.	6d. to 8d.	6d. to 8d.	5d. to 7d.	7d. to 8d.	7d. to 9d.	5d. to 7d.	4d. to 8d.
IV. DAIRY-PRODUCE.									
Butter, fresh, factory per lb.	1/1d. to 1/3	1/ to 1/2	1/2	1/ to 1/2	1/3	1/1	1/ to 1/2	1/ to 1/1	10d. to 1/3
Butter, fresh, dairy per lb.	10d. to 1/3	1/ to 1/2	1/ to 1/2	11d.	10d. to 1/	10d.	1/ to 1/2	1/ to 1/1	10d. to 1/3
Butter, salt .. per lb.	8d. to 1/	10d.	9d. to 1/	8d. to 11d.	10d.	10d. to 1/	10d. to 1/	10d. to 1/	9d. to 1/3
Cheese, colonial .. per lb.	7d. to 8d.	6d. to 8d.	6d. to 10d.	9d. to 9d.	7d. to 9d.	8d.	8d. to 9d.	6d. to 8d.	7d. to 10d.
Cheese, imported .. per lb.	1/1 to 1/6	2/	1/3 to 2/6	1/9 to 2/6	..	1/4	..	1/2 to 1/10	1/ to 1/9
Milk .. per quart	3d. to 4d.	3d.	3d. to 4d.	3d. to 4d.	4d.	4d. to 5d.	5d. to 6d.	3d. to 4d.	3d. to 4d.

Articles.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
V. FARM-YARD PRODUCE.									
Geese ..	7/ to 12/	9/	7/6 to 10/	5/9 to 10/	6/ to 7/	5/ to 10/	8/ to 10/	5/ to 12/	6/ to 10/
Ducks ..	3/ to 7/	5/6 to 6/	3/ to 5/6	5/3 to 8/6	5/ to 5/6	5/ to 6/6	5/6 to 6/	4/ to 6/	4/ to 6/6
Fowls ..	3/6 to 6/	4/6 to 5/	2/6 to 5/	4/ to 6/	3/ to 5/	3/ to 5/6	4/6 to 7/	2/6 to 5/	2/6 to 5/
Turkeys ..	4/ to 10/	9/6 to 12/6	7/6 to 11/	5/6 to 10/	5/ to 11/	7/ to 9/	10/ to 10/6	6/ to 10/6	5/ to 15/
Bacon ..	6 1/2d. to 9d.	8d. to 10d.	7d. to 9d.	9d. to 10 1/2d.	8d. to 10d.	9d. to 10d.	10d.	7d. to 10d.	8d. to 1/
Ham ..	7d. to 10d.	9d to 1/	9d. to 10d.	10d. to 11d.	9d. to 11d.	10d.	10d.	8d. to 11d.	9d. to 1/1
Eggs ..	9d to 1 1/2	1/	1/	9d. to 1/	10d. to 1 1/3	1/2 to 1 1/3	1 3/8 to 2/	9d. to 1/	9d. to 1 1/3
VI. GARDEN PRODUCE.									
Potatoes (old), wholesale per ton ..	180/ to 260/	240/	260/ to 300/	100/ to 200/	100/ to 200/	250/	200/ to 260/	195/ to 280/	180/ to 260/
Potatoes (old), retail per cwt. ..	11/ to 13/	15/	13/ to 16/	10/ to 12/	11/ to 12/	10/ to 13/6	14/ to 15/	12/ to 16/6	10/ to 14/3
Onions ..	1d. to 3d.	4d.	2d. to 3 1/2d.	1d. to 2d.	1 1/2d. to 2d.	1 1/2d. to 2d.	2d.	1 1/2d. to 2d.	1d. to 3d.
Carrots ..	1/ to 2/	1/6 to 2/	1/ to 2/	1/ to 2/	2/4 to 3/	2/	3/	1/ to 2/	1/ to 3/
Turnips ..	1/ to 2/	1/6 to 2/	1/ to 2/	1/ to 2/	2/4 to 3/	1/	3/	1/ to 2/	1/6 to 3/
Cabbages ..	1/6 to 8/	2/	1/ to 3/	1/6 to 4/	2/ to 3/	1/6	3/ to 4/	2/ to 3/	1/ to 4/
VII. MISCELLANEOUS ARTICLES.									
Tea ..	1/4 to 1/8	1/3 to 2/	1/6 to 1/3	1/6 to 2/	1/6 to 2/	1/4 to 2/	1/6 to 2/	1/ to 1/10	1/ to 2/3
Coffee ..	1/3 to 1/8	1/8 to 1/3	1/6 to 1/10	1/6 to 2/	1/9 to 1/10	1/6 to 1/9	1/9 to 2/	1/6 to 2/2	1/4 to 1/8
Sugar ..	2d. to 3d.	2 1/2d.	2 1/2d.	2d. to 2 1/2d.	2 1/2d. to 3d.	2 1/2d.	2 1/2d. to 3d.	2 1/2d. to 3d.	2d. to 3d.
Rice ..	2d. to 2 1/2d.	2 1/2d. to 3d.	2 1/2d. to 3d.	2d. to 2 1/2d.	2 1/2d. to 3d.	2d. to 2 1/2d.	3d.	2 1/2d. to 3d.	2d. to 3d.
Salt ..	1d.	1d.	1d.	1d.	1d.	1d.	1d. to 1 1/2d.	1d.	1d. to 1 1/2d.
Soap ..	15/ to 30/	26/ to 27/	12/6 to 30/	16/ to 24/	25/	17/ to 20/	17/ to 22/	20/ to 24/	12/ to 26/
Candles ..	6d. to 8d.	6d. to 7d.	7d. to 8d.	6 1/2d. to 8d.	7d. to 8d.	7d.	7d. to 8d.	6 1/2d. to 8d.	5 1/2d. to 8d.
Tobacco ..	5/2 to 6/	5/3 to 6/	5/6 to 6/	5/3 to 7/	5/6 to 6/8	5/6 to 6/	5/6 to 6/	5/3 to 8/	5/6 to 7/6
Coal ..	22/ to 37/6	40/ to 45/	35/ to 45/	32/ to 50/	35/ to 50/	22/6 to 35/	20/ to 28/	32/ to 45/	21/ to 35/
Firewood ..	14/ to 30/	35/	24/ to 40/	23/ to 48/	25/ to 40/	20/ to 32/	20/ to 25/	31/ to 40/	23/ to 35/
VIII. BEER, WINES, SPIRITS.									
Beer, colonial .. per hhd.	80/ to 92/6	80/ to 85/	85/ to 100/	80/ to 130/	80/ to 150/	80/ to 85/	80/ to 90/	75/ to 95/	67/ to 110/
Beer, English, bottled per doz. qts. ..	12/ to 14/	13/ to 15/	14/6 to 16/6	14/ to 16/6	14/ to 18/	14/ to 15/	15/ to 16/	13/6 to 18/	14/6 to 18/
Brandy ..	25/ to 28/6	21/ to 32/6	28/ to 30/	26/ to 30/	26/ to 30/	26/	26/	26/ to 34/	27/ to 36/
Rum ..	25/ to 30/	21/ to 35/	24/ to 30/	22/ to 30/	26/ to 30/	25/	25/6	23/6 to 28/	26/ to 30/
Whisky ..	25/ to 30/	26/6 to 30/	28/ to 30/	25/ to 30/	26/ to 36/	26/	26/	25/6 to 32/	26/ to 30/
Gin ..	20/ to 30/	35/	24/ to 30/	20/ to 30/	26/ to 36/	20/ to 25/	20/ to 26/	23/6 to 30/	22/ to 30/
Wine, Australian .. per gallon	14/ to 18/	12/ to 18/	12/6 to 26/	14/ to 18/	16/ to 20/	13/6 to 15/	12/6 to 17/	13/6 to 17/6	17/6 to 24/
Wine, European .. per gallon	20/ to 36/	12/ to 22/	18/ to 30/	20/ to 40/	20/ to 30/	18/	17/ to 18/	16/ to 20/	18/6 to 27/

The following table shows the average weekly rents paid for dwellings in selected boroughs according to the census returns of April, 1911.

AVERAGE WEEKLY RENTS PAID FOR DWELLINGS IN SELECTED BOROUGHS AT THE CENSUS OF APRIL, 1911.																								
Name of Borough.	Three Rooms.		Four Rooms.		Five Rooms.		Six Rooms.		Seven Rooms.		Eight Rooms.		Nine Rooms.		Ten Rooms.									
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.								
Whangarei	0	7	4-20	0	8	9-11	0	11	1-07	0	13	6-50	0	18	3-67	0	17	9-33	1	0	0	£	s. d.	
Birkenhead	0	7	10-55	0	9	7-39	0	11	2-59	0	12	1-37	0	17	6	0	19	2	1	0	0	£	s. d.	
Northcote	0	6	0-86	0	9	10	0	12	10-37	0	14	11-61	0	18	9-78	1	6	6	1	0	0	£	s. d.	
Devonport	0	8	3-86	0	11	9-15	0	14	11-37	0	17	5-76	0	18	6-20	1	2	3-47	1	3	9-24	1	2	8
Auckland	0	8	5-88	0	10	9-94	0	13	5-48	0	16	2-80	0	18	10-51	1	2	4-08	1	4	8-46	1	11	10-32
Grey Lynn	0	10	7-64	0	11	6-29	0	14	4-93	0	16	8-74	0	19	0-58	0	19	10						
Newmarket	0	9	3-33	0	10	7-33	0	13	1-78	0	16	5-74	0	18	7-03	1	1	5-25	1	17	4-50	1	4	2
Mount Eden	0	9	9	0	11	11-91	0	15	0-61	0	17	4-79	0	19	11-64	1	0	10-92	1	2	5-30	1	3	7
Mount Albert	0	8	7-86	0	12	4-31	0	14	3-48	0	16	1-64	0	17	11-59	1	2	0-92	1	6	3-20			
Parnell	0	9	8-10	0	10	11-72	0	13	3-28	0	15	7-20	0	19	7-22	1	3	4-96	1	8	7-36			
Onehunga	0	6	0	0	8	11-28	0	10	11-73	0	12	2-89	0	13	2-54	0	16	2-92	0	13	0	1	10	3-61
Waikanae	0	6	7-78	0	8	6-76	0	9	10-23	0	11	7-42	0	13	5-25							1	3	6-33
Gisborne	0	8	2-77	0	12	0-77	0	14	7-04	0	16	3-14	1	0	1-20	1	0	0-35	1	0	9	1	6	1-77
New Plymouth	0	6	6-40	0	9	1-59	0	10	8-62	0	13	7-63	0	16	4-89	0	15	9-96	0	16	8	1	3	0
Napier	0	8	10-72	0	11	2-16	0	14	3-67	0	17	10-18	1	0	5-26	1	4	2	1	3	6-86	1	5	9-25
Dannevirke	0	6	10-28	0	8	5-38	0	9	8-97	0	12	4-49	0	15	6-26	0	18	9-92	0	14	10-50	1	6	6
Wanganui	0	8	2-79	0	9	11-46	0	12	6-80	0	14	10-01	0	17	5-94	0	19	6-49	0	19	5-20	1	5	11-53
Wanganui East	0	7	0-83	0	9	4-32	0	10	1-79	0	11	10-95	0	13	3-43									
Palmerston North	0	8	0-49	0	10	3-12	0	12	6-62	0	14	8-99	0	18	1-16	0	19	3-51	0	18	2-89	1	5	5-80
Masterton	0	7	4-45	0	7	11-91	0	10	9-47	0	12	2-84	0	14	5-75	0	15	10-91	0	18	8-56			
Lower Hutt	0	8	1-80	0	11	3-27	0	13	2-64	0	15	5-16	1	3	0-36	1	4	5				1	10	2-50
Petone	0	9	8-24	0	10	10-92	0	12	6-84	0	14	8-05	0	14	8-05	0	17	7-71				1	5	0
Onslow	0	9	2-40	0	11	5-05	0	13	1-41	0	16	7-69	1	0	1-20	0	18	9-66				1	19	5-10
Wellington	0	11	5-83	0	14	4-26	0	17	1-88	1	0	11-58	1	5	1-15	1	19	3-96	1	15	8-99			
Karori	0	12	0	0	11	0-05	0	14	5-05	0	17	5-33	0	17	7-50	1	0	2						
Miramar	0	9	11-08	0	11	8-06	0	15	1-13	0	16	2-68	0	15	2-20	1	0	0						
Nelson	0	6	8-33	0	8	7-05	0	10	9-95	0	12	5-17	0	14	7-47	0	15	7-12	0	19	10-30	1	0	3-80

AVERAGE WEEKLY RENTS, ETC.

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Name of Borough.	Three Rooms.	Four Rooms.	Five Rooms.	Six Rooms.	Seven Rooms.	Eight Rooms.	Nine Rooms.	Ten Rooms.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Greymouth ..	0 7 1-79	0 10 0-73	0 12 5-29	0 13 4-72	0 16 8-49	0 18 7-50	0 19 4-50	0 18 ..
Lytelton ..	0 6 0-91	0 8 3-98	0 9 11-69	0 12 6-20	0 15 3-36	0 15 10-17	0 18 0 ..	0 18 ..
Christchurch ..	0 7 11-16	0 10 5-97	0 13 2-88	0 15 5-22	0 18 10-48	1 0 8-82	1 2 11-69	1 6 6-75
Woolston ..	0 7 6-60	0 9 9-64	0 12 0-20	0 12 3-30	..	0 16 6 ..	..	..
Spreydon ..	0 7 5-55	0 10 10-93	0 12 8-71	0 15 4-46	0 17 8-29	1 10 0 ..	..	..
New Brighton ..	0 9 3-07	0 11 11 ..	0 13 10-07	0 14 1-49	0 16 1-85	0 15 0 ..	..	..
Sumner ..	0 10 0-67	0 13 11-66	0 16 9-23	0 16 6-33	1 3 10-59	1 6 0 ..	1 0 0 ..	..
Timaru ..	0 7 4-44	0 10 5-17	0 13 8-27	0 17 11-07	1 1 9-32	1 3 5-22	..	1 8 1 ..
Oamaru ..	0 5 6 ..	0 7 11-50	0 10 5-83	0 12 3-61	0 15 4-74	1 0 8-46	0 19 7-50	..
Dunedin ..	0 7 9-29	0 10 6-01	0 13 1-04	0 15 11-21	0 19 1-29	1 4 0-22	1 6 6-50	1 7 8-87
West Harbour ..	0 7 2 ..	0 7 10-55	0 9 0-80	0 12 2-04	0 14 6 ..	1 0 0 ..	..	..
Maori Hill ..	0 7 3-71	0 9 9-43	0 12 9-52	0 12 11-16	0 18 4-25	1 0 7-33	..	1 10 0 ..
Roslyn ..	0 7 2-30	0 9 9-65	0 12 11-73	0 16 10-48	1 1 1-14	0 19 11-71	1 2 0-86	1 8 8 ..
Mornington ..	0 6 11-45	0 9 10 ..	0 12 2-27	0 14 11-77	0 18 9-97	0 19 2-38	1 2 8-75	..
St. Kilda ..	0 8 7-91	0 11 1-53	0 14 2-11	0 16 11-43	0 18 7-06	1 0 5 ..	..	..
Green Island ..	0 5 10-50	0 7 11-33	0 9 9-02	0 10 6 ..	0 9 10 ..	0 13 10-43	..	..
Invercargill ..	0 6 11-92	0 8 8-47	0 11 5-08	0 13 11-02	0 16 4-62	0 19 8-70	1 0 3-87	1 0 5-75
Invercargill South ..	0 5 6 ..	0 8 4-44	0 9 3-29	0 8 6-31	0 12 3-33	0 16 2 ..	..	..
Campbelltown ..	0 5 10-25	0 9 5-58	0 9 11-97	0 11 10-12	0 11 4 ..	0 12 3 ..	1 6 0 ..	..

The Government offers facilities for men with moderate incomes to obtain homes for themselves on easy terms. The system is described in this book under the heading "Labour Laws."

SECTION XXIII.—PUBLIC FINANCE.

SUBSECTION A.—REVENUE AND EXPENDITURE OF THE GENERAL GOVERNMENT.

THE various Acts relating to the custody and administration of the public moneys and securities are now consolidated in the Public Revenues Act, 1908. All public moneys, excepting those payable to or received by the Post Office, the Government Insurance Office, the Government Accident Insurance Office, the Public Trust Office, the Commissioners of the Public Debts Sinking Funds, the New Zealand State-guaranteed Advances Office, the State Fire Insurance Office, and the deposits under the New Zealand Consols Act, are paid into one account at the bank called the "Public Account," and are carried to one or other of the following accounts or funds in the books of the Treasury—

I. The Consolidated Fund.

II. The Public Works Fund.

III. Separate accounts or funds created under any special Act.

The main Consolidated Fund Account records the ordinary public revenue and expenditure. There are certain subsidiary accounts to this fund which come under the third head in the above category. The Public Works Fund Account contains receipts from loans or aids from the Consolidated Fund and the expenditure on public works, immigration, or special services legally chargeable to that account.

The financial year commences on the 1st day of April and ends on the 31st day of March. The revenue of any financial year is the money received into the Public Account at the bank at Wellington within the year; the expenditure is the money paid at the Treasury within the year, and the money paid by imprestees, of which accounts are received at the Treasury within the year. Imprests not accounted for at the end of a financial year are included in the accounts of the following year.

At the end of each financial year the Appropriation Acts lapse, but the Minister of Finance is authorized for a period of three months from the commencement of the next financial year to pay money in respect of any service, provided the amount does not exceed the unexpended balance voted for that purpose in the previous year, together with an amount equal to one-fourth of such vote.

The usual practice is for Parliament to meet at the end of June in each year, and vote supplies from month to month until the estimated expenditure for the year has been approved and the annual Appropriation Act is passed.

The post-audit system was adopted as from 1st April, 1911, and claims for payment of moneys out of the Public Account are now paid before being audited. They must be certified as correct by the proper officer, and forwarded by him to the Head of his Department, who approves and transmits the claim to the Treasury. Payment is then made by the Treasury, and the claim is afterwards submitted for audit.

The total revenue and expenditure of the Consolidated Fund Account for the financial years ended the 31st March, 1902 to 1911, is shown in the following table, together with the excess of revenue for each year and the amount of such excess transferred to the Public Works Fund in the succeeding year:—

Year ended 31st March.	Revenue.	Expenditure.	Excess of Revenue over Expenditure.	Amount of Excess transferred to the Public Works Fund.
	£	£	£	£
1902	6,152,841	5,914,915	237,926	500,000
1903	6,447,435	6,214,019	233,416	200,000
1904	7,130,117	6,434,281	695,836	350,000
1905	7,347,197	6,635,902	711,295	600,000
1906	7,650,098	7,122,340	527,758	500,000
1907	8,478,956	7,774,926	704,030	775,000
1908	9,063,989	8,213,965	850,024	800,000
1909	9,001,986	8,785,513	216,473	800,000
1910	9,238,917	8,990,922	247,995	..
1911	10,297,273	9,343,106	954,167	800,000
Totals, 10 years	80,808,809	75,429,889	5,378,920	5,325,000

To the amount of excess revenue for the ten years must be added the sum of £532,564 brought forward from the financial year ended 31st March, 1901, making a total of £5,911,484. Deducting the total amount transferred to the Public Works Fund, there remains a balance of £586,484, which has been carried forward to the current year's account.

The total amount of excess revenue transferred to the Public Works Fund during the twenty financial years ended 31st March, 1911, was £8,030,000. The Minister of Finance proposes to transfer £500,000 during the year ending 31st March, 1912.

CONSOLIDATED FUND—REVENUE.

An analysis of the revenue received during each of ten financial years is made in the next table.

CONSOLIDATED FUND—REVENUE, 1901-2 TO 1910-11.

Year ended 31st March.	Revenue derived from				Total Revenue.
	Taxation.	Services.	Crown Lands.	Other Sources	
	£	£	£	£	£
1902 ..	3,113,079	2,500,285	249,619	239,858	6,152,841
1903 ..	3,277,964	2,661,332	252,278	255,861	6,447,435
1904 ..	3,649,601	2,910,894	247,842	321,780	7,130,117
1905 ..	3,754,379	3,014,212	260,021	318,585	7,347,197
1906 ..	3,841,596	3,195,849	260,789	351,864	7,650,098
1907 ..	4,264,555	3,558,616	250,900	404,885	8,478,956
1908 ..	4,645,754	3,793,356	289,603	335,276	9,063,989
1909 ..	4,377,761	4,047,034	222,857	354,334	9,001,986
1910 ..	4,180,516	4,420,096	269,730	368,575	9,238,917
1911 ..	4,837,322	4,743,056	310,894	4,6,001	10,297,273
Totals, 10 years	39,942,527	34,844,730	2,614,533	3,407,019	80,808,809

Revenue under the head of "Taxation" includes Customs and Excise duties, land-tax, income-tax, bank-note issue, and totalizator taxes. Revenue from "Services" consists of Railway, Post and Telegraph receipts, and certain fees paid in return for special services. Revenue from "Crown Lands" includes proceeds of sales and rents. For the year ended 31st March, 1910, the income from National Endowments, £129,683, was held in the Deposit Account pending allocation to the purposes for which the endowments were created—viz., education and old-age pensions, and after deducting expenses of administration, surveys, roading, &c., the balance was brought to account and expended during the following year. The amounts shown as "Other Sources" include miscellaneous revenue and small amounts recovered in respect of expenditure of previous years which are classed as revenue although, strictly speaking, they do not come under that head.

The total revenue per head of population, and the amounts per head derived from taxation and from other sources, during the past ten years is shown in the following table:—

REVENUE PER HEAD OF POPULATION, TEN YEARS.

Year.	Revenue per Head derived from		Total Revenue per Head.
	Taxation.	Other Sources.	
	£ s. d.	£ s. d.	£ s. d.
1901-2	3 19 8	3 17 10	7 17 6
1902-3	4 1 8	3 19 0	8 0 8
1903-4	4 8 4	4 4 1	8 12 5
1904-5	4 8 2	4 4 4	8 12 6
1905-6	4 7 7	4 6 9	8 14 4
1906-7	4 14 7	4 13 5	9 8 0
1907-8	5 0 4	4 15 6	9 15 10
1908-9	4 11 11	4 17 0	9 8 11
1909-10	4 5 6	5 3 5	9 8 11
1910-11	4 16 11	5 9 5	10 6 4

CONSOLIDATED FUND—EXPENDITURE.

Expenditure out of the Consolidated Fund is grouped under two main headings by the Treasury, "Permanent" and "Annual." Permanent appropriations, as the name implies, are those fixed by special Acts of the Legislature. Annual appropriations are voted each year by resolution of Parliament, and include the cost of the business undertakings of the State. In the following table this grouping has not been adopted, as it is considered more desirable to show the growth of the main items of expenditure during the last ten financial years:—

Year ended 31st March.	Amount expended on					Total Expendi- ture.
	Working Railways.	Post and Telegraph.	Education	Interest, &c., on Pub- lic Debt.	Other Expenses.	
	£	£	£	£	£	£
1902 ..	1,280,997	463,817	539,317	1,803,939	1,826,845	5,914,915
1903 ..	1,357,385	485,860	566,568	1,900,979	1,903,227	6,214,019
1904 ..	1,451,954	524,500	588,860	1,957,963	1,911,004	6,434,281
1905 ..	1,471,844	557,535	653,272	1,993,729	1,959,522	6,635,902
1906 ..	1,594,954	577,115	714,071	2,087,204	2,148,996	7,122,340
1907 ..	1,850,047	617,270	813,580	2,172,092	2,321,937	7,774,926
1908 ..	1,963,428	707,146	843,311	2,187,419	2,512,661	8,213,965
1909 ..	2,120,987	806,293	874,818	2,258,365	2,725,050	8,785,513
1910 ..	2,168,189	855,862	936,875	2,397,462	2,632,534	8,990,922
1911 ..	2,270,851	911,529	984,854	2,458,452	2,717,420	9,343,106
Totals, 10 years	17,530,636	6,506,927	7,515,526	21,217,604	22,659,196	75,429,889

Among the items included in "Other Expenses" is old-age pensions, which amounted to £207,509 in 1901-2 and to £382,792 in 1910-11. After deducting the amounts received by alienation of Crown lands the charges of the public debt are found to have absorbed 29·65 per cent. of the revenue in 1901-2 and 24·03 per cent. in 1910-11.

CONSOLIDATED FUND—RECEIPTS AND EXPENDITURE DURING THE YEAR 1910-11.

The total receipts of the Consolidated Fund for the financial year 1910-11, including a balance of £432,316 brought forward from the previous year, were £10,729,589, and the total expenditure for the same period was £9,343,106, excluding £800,000 transferred to the Public Works Fund, leaving a balance of £586,483 to carry forward. Treasury bills outstanding at the beginning of the year amounting to £100,000 has been deducted from the balance.

CONSOLIDATED FUND—RECEIPTS, 1910-11.

						£	£
From taxation—							
Customs	..	..	..	..	..	3,027,829	
Excise..	..	..	..	..	..	118,100	
Land—							
Ordinary	..	..	..	..	..	£416,426	
Graduated	..	..	..	..	..	209,493	
Absentee	..	..	..	..	..	2,804	
							628,723
Income-tax	..	..	..	..	..	407,235	
Death duties	..	..	..	..	..	323,783	
Bank-note-issue tax	..	..	..	..	..	48,713	
Other taxes	..	..	..	..	..	282,939	
							4,837,322
From services—							
Railways	..	..	..	..	..	3,483,755	
Postal	..	..	..	..	..	603,150	
Telegraph	..	..	..	..	..	272,943	
Telephone	..	..	..	..	..	161,173	
Other services	..	..	..	..	..	222,035	
							4,743,056
Land revenue—							
Alienation	..	..	..	..	..	65,075	
Rents, Crown lands	..	..	..	..	..	189,957	
Net revenue from	National		Endowment		lands		
(1909-10)	..	..	..	..	..	55,862	
							310,894
Miscellaneous	..	..	..	..	..	..	406,001
Total	..	..	..	..	..	..	£10,297,273

Taxation represented 46·98 per cent. of the total revenue for the year 1910-11, and services contributed 46·06 per cent. For the previous financial year the proportions were 45·24 per cent. and 47·84 per cent. respectively.

As previously explained, the amount shown as net revenue from National Endowment lands represents the money received from that source during the previous financial year. The method adopted is

to place the amount received under this head each year to a separate account, and, after deducting necessary expenses, to transfer the balance to the Consolidated Fund Account. Seventy per cent. of this balance is expended on education, and 30 per cent. on old-age pensions.

CONSOLIDATED FUND—EXPENDITURE, 1910-11.

	£	£
Charges of the public debt (excluding interest and sinking fund charges paid out of separate accounts) ..		2,458,452
Pensions and allowances—		
Old-age pensions	382,792	
Civil and military pensions and allowances ..	46,585	
Civil Service and Railway Superannuation Funds ..	57,500	
		486,877
Payment to local bodies—		
Subsidies	131,017	
Endowments revenue	97,598	
Thirds and fourths rents of Crown lands ..	32,993	
Timber and flax royalties	7,404	
Other payments	1,316	
		270,328
Public instruction—		
Elementary	635,103	
Secondary and higher	103,931	
Manual and technical	59,296	
Training of teachers	35,070	
Native schools	29,214	
Industrial schools	26,816	
School buildings	72,179	
Departmental and miscellaneous	23,245	
		984,854
Judicial and legal—		
Administration of justice	117,530	
Police	177,524	
Prisons	44,923	
		339,977
Railways, working-expenses		2,270,851
Postal and Telegraph services		911,529
Defence (including naval defence, £100,000)		312,281
Other expenditure—		
Departmental	1,259,684	
Miscellaneous	48,273	
		1,307,957
Total		£9,343,106

A comparison of the revenue of the Consolidated Fund for the year 1910-11 with that for the previous year, the percentage of each item to the totals and the increase or decrease, as the case may be, is given in the following table :—

CONSOLIDATED FUND—REVENUE FOR 1910-11, COMPARED WITH 1909-10.

Head of Revenue.	Revenue of Consolidated Fund.				Increase or Decrease during 1910-11.*	
	1909-10.	Per Cent. of Total.	1910-11.	Per Cent. of Total.	Numerical	Per Cent.
Taxation—	£		£		£	
Customs and Excise	2,786,490	30·16	3,145,929	30·55	359,437	12·89
Land ..	642,270	6·95	628,723	6·11	-13,547	-2·10
Income ..	316,835	3·43	407,235	3·95	90,400	28·53
Death duties ..	192,014	2·08	323,783	3·14	131,769	68·62
Other taxes ..	242,907	2·62	331,652	3·22	88,745	36·53
Services—						
Railways ..	3,258,263	35·27	3,483,755	33·83	225,492	6·92
Postal ..	566,990	6·14	603,150	5·86	36,160	6·38
Telegraph ..	250,212	2·71	272,943	2·65	22,731	9·08
Telephone ..	144,298	1·56	161,173	1·57	16,875	11·69
Other services	200,333	2·17	222,035	2·16	21,702	10·83
Land revenue ..	269,730	2·92	310,894	3·02	41,164	15·26
Miscellaneous ..	368,575	3·99	406,001	3·94	37,426	10·15
Totals ..	9,238,917	100·00	10,297,273	100·00	1,058,356	11·45

* Minus sign (—) signifies decrease.

The expenditure of the Consolidated Fund Account for the last two financial years is presented in the next table in similar form to the above.

CONSOLIDATED FUND—EXPENDITURE FOR 1910-11, COMPARED WITH 1909-10.

Head of Expenditure.	Expenditure of Consolidated Fund.				Increase or Decrease during 1910-11 *	
	1909-10.	Per Cent. of Total.	1910-11.	Per Cent. of Total.	Numerical.	Per Cent.
Charges of the public debt	£ 2,397,462	26·67	£ 2,458,452	26·31	£ 60,990	2·54
Pensions and allowances	441,001	4·91	486,877	5·21	45,876	10·40
Payment to local bodies	244,091	2·71	270,328	2·89	26,237	10·75
Public instruction	936,875	10·42	984,854	10·54	47,979	5·12
Judicial and legal	335,779	3·73	339,977	3·64	4,198	1·25
Railways, working expenses	2,168,183	24·12	2,270,851	24·31	102,662	4·73
Postal and Telegraph services	855,862	9·52	911,529	9·76	55,667	6·50
Defence (including naval)	288,950	3·21	312,281	3·34	23,331	8·07
Other expenditure	1,322,713	14·71	1,307,957	14·00	-14,756	-1·12
Totals ..	8,990,922	100·00	9,343,106	100·00	352,184	3·92

* Minus sign (—) signifies decrease.

PUBLIC WORKS FUND—RECEIPTS AND EXPENDITURE.

The receipts of this account mainly consist of the proceeds of loans raised for the construction of public works. From time to time the fund has been aided by substantial transfers of surplus revenue from the Consolidated Fund Account. The receipts for the last ten years are shown in the next table.

PUBLIC WORKS FUND.—RECEIPTS, TEN YEARS.

Financial Year.	Amounts received.			Total Receipts.
	From Loans.	Transfers from Consolidated Fund.	Other Sources.	
	£	£	£	£
1901-2	1,863,181	500,000	1,615	2,364,796
1902-3	1,197,333	200,000	1,617	1,398,950
1903-4	1,523,950	350,000	1,664	1,875,614
1904-5	1,297,050	600,000	11,633	1,908,683
1905-6	1,052,574	500,000	3,194	1,555,768
1906-7	1,125,686	775,000	17,395	1,918,081
1907-8	1,029,600	800,000	16,454	1,846,054
1908-9	2,813,790	800,000	14,480	3,628,270
1909-10	2,091,090	..	2,607	2,093,697
1910-11	3,740,140	800,000	6,508	4,546,648

During the year 1908-9 the Wellington-Manawatu Railway was taken over by the Government, and a loan of £1,000,000 was raised for that purpose. In addition to the amount shown above, the sum of £2,705,000 was transferred during the years 1891-1901 from the Consolidated Fund Account to the Public Works Fund. The next table shows the expenditure each year since 1884 upon services which are charged to the Fund. As will be seen further on the whole of what may be termed public works are not included in this account.

EXPENDITURE ON SERVICES PROVIDED FOR BY THE PUBLIC WORKS FUND.

Year.	Immigration.	Railways.	Roads.	Development of Goldfields.	Telegraph Extension.	Public Buildings.	Lighthouses, &c.	Other Services.	Totals.
	£	£	£	£	£	£	£	£	£
1884-85...	57,148	663,063	317,043	8,029	25,799	117,361	34,033	114,251	1,336,727
1885-86...	11,075	725,496	335,904	9,032	36,010	86,859	133,975	136,435	1,475,386
1886-87...	12,454	615,265	278,617	7,605	18,952	89,598	148,705	162,228	1,333,484
1887-88...	15,598	403,726	219,519	1,016	22,984	90,529	76,825	135,962	966,159
1888-89...	8,791	272,077	106,440	55	12,047	34,592	47,593	132,344	613,939
1889-90...	867	289,572	84,126	284	16,346	35,473	9,434	46,362	482,464
1890-91...	1,823	180,020	71,289	821	16,292	22,819	2,666	39,026	334,756
1891-92...	817	154,416	101,605	2,257	27,773	34,791	7,347	62,495	391,501
1892-93...	242	220,894	105,506	3,811	29,245	31,101	11,205	60,502	462,506
1893-94...	343	176,304	147,418	5,272	16,127	44,032	6,588	10,713	406,797
1894-95...	101	247,545	164,833	5,865	19,229	54,190	3,145	9,578	504,466
1895-96...	Cr. 10	197,105	229,531	9,345	35,538	76,529	7,410	19,639	575,087
1896-97...	301	207,231	237,650	10,508	36,791	70,579	11,600	26,683	601,343
1897-98...	70	351,600	290,777	33,117	29,384	73,585	5,295	81,715	865,543
1898-99...	105	374,141	295,534	17,354	28,551	107,267	15,662	77,713	916,327
1899-1900	385	417,937	285,532	21,815	26,771	115,427	9,026	116,380	993,223
1900-1 ...	214	717,723	315,791	15,907	50,101	121,364	6,517	81,404	1,309,021
1901-2 ...	140	1,333,941	403,690	15,325	31,729	145,600	12,159	200,668	2,143,252
1902-3 ...	142	759,753	283,169	24,213	68,578	197,455	13,541	167,554	1,514,445
1903-4 ...	Cr. 7	978,704	361,842	16,278	47,227	216,192	10,863	165,728	1,796,841
1904-5 ...	6,482	811,994	230,012	6,258	79,298	116,678	5,990	97,446	1,354,158
1905-6 ...	8,753	1,077,973	360,766	18,533	77,186	160,214	4,946	109,443	1,811,819
1906-7 ...	14,353	1,326,792	366,581	11,064	114,068	226,918	4,504	104,614	2,168,894
1907-8 ...	9,131	1,272,828	331,107	8,632	155,491	226,035	6,863	99,797	2,109,882
1908-9 ...	15,077	2,278,327	481,976	32,859	163,033	245,521	19,217	87,885	3,363,895
1909-10 ...	17,002	1,279,807	367,230	18,598	123,422	276,949	16,683	116,706	2,216,397
1910-11...	5,441	1,184,083	270,648	10,845	111,868	325,613	8,427	137,766	2,058,691

The receipts and expenditure of the fund, including the renewal of loans maturing, during the financial year ended 31st March, 1911, were as under:—

PUBLIC WORKS FUND—RECEIPTS AND EXPENDITURE.

1910-11.

Receipts—

	£	£
Balance, 31st March, 1911	..	342,774
Proceeds of debentures issued under Aid to Public Works and Land Settlement Acts	2,168,350	
Temporary advances on security of debentures issued	150,000	
Proceeds of scrip and debentures issued under the Finance Act, 1909	1,250,000	
Sale of $3\frac{1}{2}$ -per-cent. stock	66,390	
Proceeds of debentures issued under the Hutt Railway and Road Improvement Acts	27,600	
Proceeds of scrip and debentures issued under the Government Railways Act, 1908, and Amendment Act, 1910	77,800	
Other receipts	..	3,740,140
Transfer from Consolidated Fund	..	6,508
		800,000
Total	..	£4,889,422

Expenditure—	£	£
Railways	1,184,083	
Roads	270,648	
Telegraph extension	111,868	
Public buildings	325,613	
Lighthouses, harbour works, and harbour defences	8,427	
Tourist and Health resorts	5,912	
Immigration	9,441	
Development of Goldfields	10,845	
Purchase of Native lands	2,976	
Lands Improvement	11,125	
Departmental	42,733	
Charges and expenses of raising loans	66,367	
Miscellaneous	8,653	
		2,058,691
Debentures redeemed and renewed		517,725
Temporary advances repaid		1,150,000
Balance, 31st March, 1911		1,163,006
Total		£4,889,422

The expenditure on roads out of the Public Works Fund does not comprise all of the moneys spent under that head by the general Government. Since 1896-97 the sum of £469,236 has been expended on construction of roads to open up Crown lands out of the moneys raised for loans to local bodies. The amount charged each year to the account is as follows:—

EXPENDITURE OUT OF LOANS TO LOCAL BODIES ACCOUNT ON CONSTRUCTION OF
ROADS SINCE 1896-97.

Year.	Amount expended. £	Year.	Amount expended. £
1897-98 ..	18,770	1905-6 ..	38,801
1898-99 ..	16,972	1906-7 ..	47,371
1899-1900 ..	31,363	1907-8 ..	38,524
1900-1 ..	37,390	1908-9 ..	54,713
1901-2 ..	31,979	1909-10 ..	40,307
1902-3 ..	18,578	1910-11 ..	39,820
1903-4 ..	25,753		
1904-5 ..	28,895	Total ..	£469,236

The roading of lands purchased for closer settlement is made a charge upon the Land for Settlements Account, and is included in the value upon which the rentals of those lands are based. The reclamation by drainage and opening up by means of roads of an area of the Hauraki Plains is provided for out of moneys borrowed for that purpose and shown in a separate account.

SEPARATE ACCOUNTS OR FUNDS.

The accounts included under this heading in some cases comprise revenue of different kinds mixed up with loan-money, while others are merely records of transactions which of their nature cannot be considered as properly belonging to the Public Account. Among the former may be counted the State Forests and State Coal-mines Account, and among the latter the accounts of local bodies, which consist of revenue collected on behalf of and paid over to local authorities, and the Deposit Accounts, consisting partly of moneys held in trust and partly of moneys held in suspense for various reasons. The transactions of these accounts or funds are shown in the following tables.

THE HAURAKI PLAINS SETTLEMENT ACCOUNT.

An Act of the General Assembly passed in 1908, authorizes the construction of works necessary for the drainage, reclamation, and opening up for settlement of a block of swampy land, part of the Hauraki Plains. The Act provides for borrowing the funds required to carry out the work, and that the future revenues of the land recovered shall be applied to the repayment of the moneys so raised. The transactions for the last three years and the total to date are given in the following table:—

Head	Year ended 31st March,			Total to 31st March, 1911.
	1909.	1910.	1911.	
Receipts—				
Land Sales, Leases, &c.	£ ..	£ ..	£ 6,014	£ 6,014
Transfer from Local Bodies Account ..	12,000	19,000	..	31,000
Advances made by New Zealand State-guaranteed Advances Office ..	..	10,000	40,000	50,000
Total	12,000	29,000	46,014	87,014
Expenditure—				
Reclamation, drainage, and road-construction ..	11,672	22,235	29,607	63,514
Payment of principal and interest ..	..	..	834	834
Total	11,672	22,235	30,441	64,848

LAND FOR SETTLEMENTS ACCOUNT.

The operations of this account during each of the five financial years ended 31st March, 1907–11, and the total transactions to the latter date, are shown in the following table;—

Head.	Year ended 31st March.					Total to 31st March, 1911.
	1907.	1908.	1909.	1910.	1911.	
Receipts—	£	£	£	£	£	£
Loans raised ..	530,040	390,690	566,020	915,735	..	5,877,912
Advances made by New Zealand State- guaranteed Ad- vances Office	..	..	..	..	33,000	33,000
Rents, &c. ..	227,548	249,273	276,480	281,359	285,543	2,276,548
Total receipts ..	757,588	639,963	842,500	1,197,094	318,543	8,187,460
Expenditure—						
Land purchases ..	117,328	565,728	339,630	260,793	158,796	5,566,588
Roading, &c. ..	76,837	47,967	42,367	35,431	25,623	513,735
Interest on loans ..	188,013	209,061	215,535	217,164	224,144	1,773,288
Payment to sinking fund	50,165	54,465	57,963	58,779	59,079	280,451
Total expenditure	432,343	877,221	655,495	572,167	467,642	8,134,062

The annual contributions to the sinking fund are paid to the Public Trustee for investment. The amount accrued on 31st March, 1911, was £301,057.

NATIVE LAND SETTLEMENT ACCOUNT.

<i>Receipts.</i>	£	<i>Expenditure.</i>	£
Amount received from State- guaranteed Advances Office	181,600	Native land purchases ..	124
Amount received for surveys	242	Expenditure under the Act ..	135,334
		Interest and sinking fund ..	2,061
Total ..	£181,842	Total ..	£137,519

LOANS TO LOCAL BODIES ACCOUNT.

<i>Receipts.</i>	£	<i>Expenditure.</i>	£
Proceeds, sale of debentures	70,000	Advances to local authorities	77,173
Refunds, unexpended balance of loans ..	2,162	Roads to open up Crown lands	39,820
Amount received from State- guaranteed Advances Office	39,820		
Total ..	£111,982	Total ..	£116,993

OPENING UP OF CROWN LANDS FOR SETTLEMENT ACCOUNT.

<i>Receipts.</i>	£	<i>Expenditure.</i>	£
Advances made by State- guaranteed Advances Office	54,265	Roads to open up Crown lands ..	45,691
Total ..	£54,265	Total ..	£45,691

NATIONAL ENDOWMENT ACCOUNT.

Under the Land Act, 1908, the net revenues from certain areas of Crown lands are to be applied to educational purposes and to payment of old-age pensions in the proportion of 70 per cent. and 30 per cent. in each case respectively. From the gross revenue is to be deducted any expenditure which may be incurred in the construction of roads, and also any sums which by law have been appropriated to local authorities out of the rents. The method adopted in dealing with the funds is to keep a separate account of all receipts and disbursements during the financial year, and at the end of that period to allocate the balance to the purposes stated above. The transactions during the year ended 31st March, 1911, were,—

<i>Receipts.</i>		£	<i>Expenditure.</i>		£
Rents, &c.	..	95,331	Construction of roads	..	5,619
			Payment to local authorities, &c.	..	79,424
Total	..	<u>£95,331</u>	Total	..	<u>£85,143</u>

OTHER ACCOUNTS AND FUNDS.

Treasury Bills Account.

<i>Dr.</i>	£	<i>Cr.</i>	£
Treasury Bills outstanding at beginning of year	.. 100,000	Treasury Bills renewed during year	.. 333,000
Issued during year	.. 1,116,000	Paid off during year	.. 883,000
		Outstanding at end of year	..
Total	.. <u>£1,216,000</u>	Total	.. <u>£1,216,000</u>

State Forests Account.

<i>Receipts.</i>	£	<i>Expenditure.</i>	£
Rents from lands set apart	.. 3,100	Expenses of nurseries, tree-planting and forest conservation	.. 23,446
Timber royalties and miscellaneous receipts	.. 11,771		
Contribution from Consolidated Fund	.. 5,000		
Total	.. <u>£19,871</u>	Total	.. <u>£23,446</u>

NAVAL DEFENCE ACT ACCOUNT.

<i>Receipts.</i>	£	<i>Expenditure.</i>	£
Naval Defence Act, 1909—		Expenditure under the Act	.. 489,289
Advances on the security of debentures issued under the Act	.. 342,000	The Naval Defence Act, 1909—	
Instalments received in respect of £1,250,000 loan authorized	.. 1,120,250	Temporary advances repaid	342,000
		The New Zealand Loans Act, 1908—	
		Charges and expenses	.. 431
Total	.. <u>£1,462,250</u>	Total	.. <u>£831,720</u>

Scenery Preservation Account.

<i>Receipts.</i>		<i>Expenditure.</i>	£
Nil.		Purchase of land, survey, and incidental expenses ..	3,731
		Total ..	<u>£3,731</u>

Local Bodies Account.

<i>Receipts.</i>	£	<i>Expenditure.</i>	£
Revenue received on account of local bodies—		Revenue paid over to local bodies ..	75,789
Fees, fines, &c. ..	10,073	Counties separate account ..	133
Endowments of land, &c. ..	21,074	Advance Account—	
Goldfields revenue ..	18,047	Sundry payments made on behalf of local bodies ..	28,067
Gold duty ..	27,967		
Counties separate accounts ..	139		
Advance Account—			
Amount repaid by local bodies ..	28,373		
Total ..	<u>£105,673</u>	Total ..	<u>£103,989</u>

This account deals with revenue collected for and paid over to local authorities, also sundry payments made on behalf of such authorities and refunded by them.

Deposit Accounts.

<i>Receipts.</i>	£	<i>Expenditure.</i>	£
Lodgments ..	305,841	Withdrawals ..	322,501
Total ..	<u>£305,841</u>	Total ..	<u>£322,501</u>

This account consists of moneys to be applied to specific purposes under various Acts, collections on behalf of local institutions, and miscellaneous items in suspense.

Conversion Account.

<i>Dr.</i>	£	<i>Cr.</i>	£
3½ per-cent. Inscribed Stock—		Debentures converted into 3½ per-cent. Inscribed Stock—	
Issued for conversion of debentures ..	3,323,660	Amount converted ..	3,258,500
Issued for expenses of conversion ..	25,610	Premiums ..	65,160
		Expenses Account—	
		Brokerage and commission ..	1,057
		Stamp duty ..	21,566
		Discount ..	237
		Miscellaneous ..	437
Total ..	<u>£3,349,270</u>	Total ..	<u>£3,346,957</u>

The Waihou and Ohinemuri Rivers Improvement Account.

<i>Receipts.</i>		£		<i>Expenditure.</i>
Debentures issued	..	100,000	Nil.	
Total	..	<u>£100,000</u>		

Rangitaiki Land Drainage Account.

<i>Receipts.</i>		£		<i>Expenditure.</i>
Advances made by State-guaranteed Advances Office	..	25,000	Nil.	
Receipts under section 7 Rangitaiki Land Drainage Act, 1910	..	716		
Total	..	<u>£25,716</u>		

Bank of New Zealand Act, 1903, Account.

<i>Dr.</i>	£	<i>Cr.</i>	£
Investment Account	.. 500,000	75,000 preference shares issued by the Bank of New Zealand	500,000
Total	.. <u>£500,000</u>	Total	.. <u>£500,000</u>

Reserve Fund Account.

<i>Dr.</i>	£	<i>Cr.</i>	£
Investment Account	.. 800,000	Securities	800,000
Total	.. <u>£800,000</u>	Total	.. <u>£800,000</u>

New Zealand Consols Account.

<i>Dr.</i>	£	<i>Cr.</i>	£
Cash in Deposit Account	.. 7,359	Consols redeemed	1,102
Investment Account	.. 402,765	Cash in Deposit Account	2
Deposits inscribed during year 1910-11	53,145	Investment Account	462,165
Total	.. <u>£463,269</u>	Total	.. <u>£463,269</u>

State Coal-mines.

<i>Receipts.</i>		£	<i>Expenditure.</i>		£
Proceeds of sale of coal	..	226,865	Working-expenses and development	257,668	
Refund of cost of construction of railway	..	1,363	Interest on debentures	4,550	
Total	..	<u>£228,228</u>	Total	..	<u>£262,218</u>

Cheviot Estate Account.

<i>Receipts.</i>		£	<i>Expenditure.</i>		£
Rents from land ..	..	12,486	Interest on loan ..	..	8,866
Interest on investments ..	..	357	Roading, &c. ..	..	15
Total ..	..	<u>£12,843</u>	Total ..	..	<u>£8,881</u>

The working account of the State coal-mines and trading account of the depots, and the capital account, are shown further on in this section.

Statement of Balances on 31st March, 1911.

The cash balances and investments of the foregoing accounts, as on 31st March, 1911, are shown in the following table:—

Account.	Cash.	Investments.	Total
<i>Cr.</i>	£	£	£
Consolidated Fund, ordinary revenue ..	586,483	..	586,483
State Forests	14,200	..	14,200
State Coal-mines	27,569	..	27,569
Scenery-preservation	2,922	..	2,922
Naval Defence Act	380,530	250,000	630,530
Local Bodies	<i>Dr.</i> 3,006	..	<i>Dr.</i> 3,006
Deposit Account	180,171	..	180,171
Public Works Fund	390,045	750,000	1,140,045
Hutt Railway and Road Improvement ..	4,814	..	4,814
Railways Improvements	18,146	..	18,146
Waihou and Ohinemuri Rivers Improvement	100,000	..	100,000
Native Land Settlement	44,322	..	44,322
Land for Settlements	53,398	..	53,398
Maori Land Settlement	4,300	..	4,300
Cheviot Estate	62,772	..	62,772
Loans to Local Bodies	18,865	..	18,865
Opening Crown Lands for Settlement ..	8,574	..	8,574
Hauraki Plains Settlement	22,665	..	22,665
National Endowment Account	66,149	..	66,149
Rangitaiki Land Drainage	25,716	..	25,716
Conversion Account	2,154	..	2,154
New Zealand Consols	2	462,165	462,167
Reserve Fund	..	800,000	800,000
Bank of New Zealand (preference shares) ..	..	500,000	500,000
Totals	2,010,791	2,762,165	4,772,956

The New Zealand State-guaranteed Advances, State Fire and Accident Accounts are not included in the above statement. These funds, as well as those of the Government Life Insurance Department, the Commissioners of the Public Debts Sinking Funds, and Public Trust Office, are administered directly by the Boards or Officials of the Departments concerned.

STATE COAL-MINES.

STATEMENT showing the TRANSACTIONS in connection with the working of
STATE COAL-MINES and DEPOTS for the Year ended 31st March, 1911.

Point Elizabeth Colliery.

<i>Dr.</i>	£	<i>Cr.</i>	£
Sales	165,472	Stocks on hand, 1st April, 1910	1,643
Stocks at mine and afloat ..	2,748	Working-expenses	76,170
Rents	12	Marine freights, wharfage, and railway haulage, &c. ..	81,111
	168,232	Depreciation	3,128
			162,052

Seddonville Colliery.

<i>Dr.</i>	£	<i>Cr.</i>	£
Sales	34,410	Stocks, 1st April, 1910	366
Stocks at wharf and afloat ..	678	Working-expenses	16,097
	35,088	Marine freight, wharfage, and railway haulage, &c. ..	20,644
		Depreciation	1,200
			38,307

Briquette Plant.

<i>Dr.</i>	£	<i>Cr.</i>	£
Sales	9,769	Stocks, 1st April, 1910	2,287
Stocks at Works	52	Working-expenses	5,274
	9,821	Haulage and freight, &c. ..	4,206
		Depreciation	728
			12,495

Wellington Depot.

<i>Dr.</i>	£	<i>Cr.</i>	£
Sales	33,792	Stocks, 1st April, 1910	1,020
Stocks on hand	1,618	Purchase coal, coke, and wood ..	25,228
	35,410	Trading-expenses	8,537
		Depreciation	149
			34,934

Christchurch Depot.

<i>Dr.</i>	£	<i>Cr.</i>	£
Sales	31,339	Stocks, 1st April, 1910	249
Stocks on hand	2,841	Purchase coal, coke, and wood ..	24,752
	34,180	Trading-expenses	8,407
		Depreciation	289
			33,697

Wanganui Depot.

<i>Dr.</i>	£	<i>Cr.</i>	£
Sales	9,507	Stocks, 1st April, 1910	635
Stocks on hand	1,148	Purchase coal, coke, and wood ..	7,206
	10,655	Trading-expenses	2,551
		Depreciation	82
			10,474

Dunedin Depot.

<i>Dr.</i>	£	<i>Cr.</i>	£
Sales	7,438	Stocks, 1st April, 1910 ..	698
Stocks on hand	848	Purchase coal, coke, and wood	5,042
		Trading-expenses	2,863
	8,286	Depreciation	59
			8,662
			300,621
		Profit	1,051
Total all accounts ..	<u>£301,672</u>	Total all accounts ..	<u>£301,672</u>

STATE COAL-MINES AND DEPOTS.

RECEIPTS and EXPENDITURE for the Year ended 31st March, 1911.

<i>Receipts.</i>	£	<i>Expenditure.</i>	£
Cash in hand and Public Account at 31st March, 1910	54,487	Development and plant, No. 2 Mine, at Point Elizabeth..	22,440
Sales of coal, &c.	232,817	Wages, mines and briquette works	79,396
Refund	386	Freight and haulage	92,289
Interest refunded	1,363	Other expenditure	67,417
		Balance, 31st March, 1911 ..	27,511
	<u>£289,053</u>		<u>£289,053</u>

LIABILITIES and ASSETS as on 31st March, 1911.

<i>Liabilities.</i>	£	<i>Assets.</i>	£
Debenture loans	130,000	Point Elizabeth Colliery No. 1—	
Sundry creditors	16,430	Property	59,423
Accrued interest	2,275	Stores and stock on hand..	4,590
Debenture Sinking Fund ..	13,200	Point Elizabeth Colliery No. 2—	
Reserve Fund	10,226	Colliery property	54,752
Balance	50,552	Seddonville Colliery—	
		Colliery property	22,798
		Briquette plant	13,839
		Stores and stock on hand..	2,279
		Boring and Prospecting ..	1,891
		Hulks	1,463
		Depots—	
		Property	11,730
		Stocks on hand	6,457
		Sundry debtors	15,950
		Cash in hand and Public Account, less unrepresented cheques	27,511
	<u>£222,683</u>		<u>£222,683</u>

Aid to Public Works and Land Settlement.

The Aid to Public Works and Land Settlement Act, 1910, authorized the raising of sums not exceeding £1,750,000 altogether, by debentures or scrip, or by the creation or issue of inscribed stock, under the provisions of the New Zealand Loans Act, 1908, in the Dominion or elsewhere.

Pending the borrowing of the money authorized, funds may be obtained by the sale, &c., of short-dated debentures, bearing interest not exceeding $4\frac{1}{2}$ per cent. per annum, and having a currency of not more than seven years.

All the money obtained under this Act is applied to the following purposes :—

1. Railways—	£
Railway-construction	800,000
Additional rolling-stock, &c., for open lines ..	350,000
2. Land-settlement and goldfields-development—	
Construction of roads, tracks, and bridges to open up backblocks, developing goldfields, and other work in connection therewith	500,000
3. For other public works	100,000
	£1,750,000

SECTION XXIII.—PUBLIC FINANCE—*continued.*

SUBSECTION B.—TAXATION.

Total Taxation.

ALL revenue collected by means of taxation is applied to general purposes. Customs duties on imported goods, excise duties on beer, and also on a few minor items, constitute the indirect taxation, land and income taxes, death duties, a tax on bank-note issues, duty on cheques and receipts for payments being the main source of revenue by direct taxation. Particulars of the collections during the past ten years, under the main headings, are shown in the following table :—

Year.	Amount of Taxation derived from					Total.
	Customs and Excise Duties.	Land-tax.	Income-tax.	Death Duties.	Other Taxes.	
	£	£	£	£	£	£
1901-2 ..	2,291,343	312,835	179,397	110,621	218,877	3,113,079
1902-3 ..	2,426,043	296,062	200,684	118,003	237,172	3,277,964
1903-4 ..	2,698,046	334,991	221,369	142,917	252,278	3,649,601
1904-5 ..	2,723,193	352,854	253,952	174,805	241,575	3,754,379
1905-6 ..	2,795,516	385,756	261,816	127,174	271,304	3,841,596
1906-7 ..	3,048,622	447,342	277,867	191,509	299,215	4,264,555
1907-8 ..	3,217,538	537,846	304,905	246,032	339,433	4,645,754
1908-9 ..	2,917,462	604,901	321,044	260,238	274,116	4,377,761
1909-10 ..	2,786,490	642,270	316,835	192,014	242,907	4,180,516
1910-11 ..	3,145,929	628,723	407,235	323,783	331,652	4,837,322

The percentage under each heading to the total amount collected for each year is as under :—

Year.	Proportion per Cent. derived from				
	Customs and Excise Duties.	Land-tax.	Income-tax.	Death Duties.	Other Direct Taxes.
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
1901-2 ..	73·61	10·05	5·76	3·55	7·03
1902-3 ..	74·01	9·03	6·12	3·60	7·24
1903-4 ..	73·93	9·18	6·06	3·92	6·91
1904-5 ..	72·67	9·40	6·76	4·66	6·51
1905-6 ..	72·77	10·04	6·82	3·31	7·06
1906-7 ..	71·49	10·49	6·51	4·49	7·02
1907-8 ..	69·26	11·58	6·56	5·29	7·31
1908-9 ..	66·64	13·82	7·33	5·95	6·26
1909-10 ..	65·63	15·13	7·46	4·52	7·26
1910-11 ..	65·03	13·00	8·42	6·69	6·86

Indirect Taxation.

During the year ended 31st March, 1911, the sum of £3,027,829 was collected, after deduction of drawbacks, for duty on imported goods, and £118,100 for excise duties, a total of £3,145,929. The amount of revenue derived from these sources for each of the past ten years is shown below.

Year.				Customs Duties.	Excise Duties.	Total.
				£	£	£
1901-2	..	..	..	2,201,116	90,233	2,291,349
1902-3	..	..	..	2,335,643	90,400	2,426,043
1903-4	..	..	..	2,601,325	96,721	2,698,046
1904-5	..	..	..	2,631,983	96,210	2,728,193
1905-6	..	..	..	2,697,411	98,135	2,795,546
1906-7	..	..	..	2,941,040	107,582	3,048,622
1907-8	..	..	..	3,103,565	113,973	3,217,538
1908-9	..	..	..	2,801,248	116,214	2,917,462
1909-10	..	..	..	2,671,121	115,369	2,786,490
1910-11	..	..	..	3,027,829	118,100	3,145,929

The increase for the period shown above is £854,580 or 37·3 per cent. There was an increase in the collection for 1910-11 as compared with the previous year of 12·92 per cent.

Classification of Customs Duties.

Statistics of the various kinds of goods imported are only available for the calendar year, so that in order to present a classification of the duties levied on imports under separate headings it is necessary to adopt the figures for that period. The tables hereunder show the amounts collected at intervals of five years, 1891-1906, and for the years 1908, 1909, and 1910, also the proportion that each class bears to the total.

Amount of Customs Revenue, 1891-1906, 1908, 1909, and 1910.

Year.	Amount of Duty derived from				Total.
	Foods and Non-alcoholic Drinks.	Clothing and Textiles.	Alcoholic Drinks and Tobacco.	All other Articles.	
	£	£	£	£	£
1891	312,809	276,072	651,680	320,141	1,560,702
1896	329,622	322,947	715,019	400,264	1,767,852
1901	321,625	434,112	928,176	512,853	2,196,766
1906	369,964	610,873	1,130,837	787,429	2,899,103
1908	130,116	621,770	1,233,297	917,903	2,903,086
1909	104,374	562,234	1,205,691	781,317	2,653,616
1910	127,329	620,888	1,255,886	950,886	2,954,989

Percentage of each Class to the Total Duty collected.

Year.	Percentage of Total Duty collected on				Total.
	Food and Non-alcoholic Drinks.	Clothing and Textiles.	Alcoholic Drinks and Tobacco.	All other Articles.	
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	
1891	20·05	17·69	41·75	20·51	100
1896	18·64	18·27	40·45	22·64	100
1901	14·64	19·76	42·25	23·35	100
1906	12·76	21·07	39·01	27·16	100
1908	4·48	21·42	42·48	31·62	100
1909	3·93	21·19	45·44	29·44	100
1910	4·31	21·01	42·50	32·18	100

There has been a great decrease during the past fourteen years in the duties levied on foods and non-alcoholic drinks. Of the total for 1910 classed under this heading the items confectionery, preserved fish, flour, bottled and preserved fruits, jams and jellies, sauces, cocoa, and chocolate account for £77,529, or 60 per cent. of the duty collected.

Direct Taxation.

Revenue by direct taxation is partly derived from a land-tax, ordinary graduated, and absentee, levied on the unimproved value, and partly from a tax on all incomes above £300 per annum. The operation of these taxes is fully described in Part III of this volume. Death duties form the principal item of the total taxation collected by means of stamps. Particulars of the revenue derived from these sources during the past ten years are given in the next table.

Revenue derived from Direct Taxation, Ten Years.

Year.	Revenue derived from					Total
	Land-tax.			Income-tax.	Other Taxes.	
	Ordinary.	Graduated.	Absentee.			
	£	£	£	£	£	£
1901-2 ..	233,545	78,214	1,076	179,397	329,498	821,730
1902-3 ..	217,307	77,832	923	200,684	355,175	851,921
1903-4 ..	232,774	98,681	3,536	221,369	395,195	951,555
1904-5 ..	254,726	94,703	3,425	253,952	419,380	1,026,186
1905-6 ..	277,144	104,949	3,663	261,816	398,478	1,046,050
1906-7 ..	317,176	125,929	4,237	277,867	490,724	1,215,933
1907-8 ..	346,166	186,000	5,680	304,905	585,465	1,428,216
1908-9 ..	389,844	209,248	5,809	321,044	534,354	1,460,299
1909-10 ..	417,668	220,044	4,558	316,835	434,921	1,394,026
1910-11 ..	416,426	209,493	2,804	407,235	655,435	1,691,393

During the above period the total amount of revenue from direct taxation increased by £896,663 or 105·83 per cent., land-tax increased by £315,887 or 100·97 per cent., income-tax by £227,838 or 127 per cent., and other taxes by £325,937 or 98·92 per cent.

The total number of land- and income-tax payers for each of the past ten years was:—

Number of Taxpayers.

Year.					Land-tax	Income-tax.
1901-2	..	..	..	..	18,468	6,556
1902-3	..	..	..	..	18,869	7,589
1903-4	..	..	..	..	20,865	8,258
1904-5	..	..	..	..	23,895	8,934
1905-6	..	..	..	..	24,246	8,993
1906-7	..	..	..	..	27,402	9,540
1907-8	..	..	..	..	28,991	10,420
1908-9	..	..	..	..	30,855	10,839
1909-10	..	..	..	..	33,162	11,175
1910-11	..	..	..	..	33,516	11,303

Land-tax payers increased by 15,048 or 81·48 per cent, and income-tax payers by 4,747 or 72·4 per cent. during the period shown.

DEATH DUTIES.

Estate Duty.

Under the Death Duties Act, 1909, an estate duty is levied upon the final balance of all property of a deceased person which is situated in New Zealand at his death in excess of the value of £500. In the case of any estate the final balance of which does not exceed £10,000, any interest acquired by the wife of the deceased up to the value of £5,000 is exempt from estate duty, but the rate of duty on the whole estate must be determined before the deduction is made. The following is the scale of duties:—

Net Value of Estate.				Rate of Duty.	
£500 but not exceeding £1,000				..	1 per cent.
£1,000	"	£2,000	..	..	2 "
£2,000	"	£3,000	..	..	2½ "
£3,000	"	£4,000	..	..	3 "
£4,000	"	£5,000	..	..	3½ "
£5,000	"	£6,000	..	..	3¾ "
£6,000	"	£7,000	..	..	4 "
£7,000	"	£8,000	..	..	4½ "
£8,000	"	£9,000	..	..	4¾ "
£9,000	"	£10,000	..	..	5 "
£10,000	"	£12,000	..	..	5½ "
£12,000	"	£14,000	..	..	5¾ "
£14,000	"	£16,000	..	..	6 "
£16,000	"	£18,000	..	..	6½ "
£18,000	"	£20,000	..	..	6¾ "
£20,000	"	£25,000	..	..	7 "

On estates exceeding £25,000 the rate of duty progresses by one-third of one per cent. for each successive £5,000, but the maximum rate shall not exceed 15 per cent. Personal property of persons domiciled in New Zealand is liable to estate duty wherever situated.

Succession Duty.

Succession duty is payable by any person who acquires a beneficial interest in the estate of a deceased person either by will or intestacy, according to the following scale :—

- (1.) By wife, child, grandchild, or other descendant of deceased. If the value of the succession does not exceed £20,000 no duty is payable, but if the value is in excess of that amount a tax of 2 per cent. is levied on the total value, but the duty payable shall not be greater than the amount by which the succession exceeds £20,000.
- (2.) By husband, 2 per cent.
- (3.) By relatives in any degree more remote than the fourth, 5 per cent.
- (4.) In all other cases 10 per cent.

In regard to the last three mentioned cases no duty shall be payable in respect of any succession the value of which does not exceed £200, and the duty payable on any succession in excess of that sum shall not be greater than the amount by which the succession exceeds £200.

Excepting in the first case mentioned above, if the value of the succession exceeds £20,000, any such excess is charged with double the rate of the ordinary duty. Charitable trusts are exempt from succession duty.

Gift Duty.

A gift means any disposition of property which is made otherwise than by will, whether with or without an instrument in writing, without fully adequate consideration in money or its equivalent. The duty payable is as follows :—

- (1.) On a gift which together with the value of all other gifts made at the same time, or within twelve months previously or subsequently by the same donor to the same or any other beneficiary, otherwise than by way of a charitable trust, does not exceed the value of £1,000, no duty shall be charged.
- (2.) On gifts exceeding the value of £1,000, 5 per cent. Antenuptial marriage settlements and charitable gifts are exempt from duty.²

Death duties are due and payable to the Commissioner of Stamps within six months from the death of the deceased, and gift duties at the time the gift is made.

Local Taxation.

Local governing authorities have power, under various Acts of the legislature, to impose taxes for general or special purposes. These powers are fully set out in Section II of this book. The

amount of revenue collected for local purposes during ten years is shown below.

Year.	Local Revenue derived from			Total.
	General Rates.	Special and Separate Rates.	Licenses and other Taxes.	
	£	£	£	£
1900-1	490,789	243,235	99,114	833,138
1901-2	548,859	251,611	96,354	896,824
1902-3	581,463	265,252	103,197	949,912
1903-4	640,475	309,675	100,786	1,050,936
1904-5	704,315	315,116	101,947	1,121,378
1905-6	817,443	333,777	106,905	1,258,125
1906-7	889,711	343,337	105,488	1,338,536
1907-8	949,139	407,119	110,340	1,466,598
1908-9	970,225	420,473	111,195	1,501,893
1909-10	1,058,447	467,860	108,470	1,634,777

The period comprehended in the above table was marked by exceptional activity in local enterprise, the necessary funds being provided partly out of general rates, but mainly by borrowing, interest on loans and payments to sinking funds being secured in most cases by special rates. The increase in the amount of general rates collected during the ten years was £567,658 or 115·66 per cent., special and separate rates increased by £224,625 or 92·35 per cent., and total rates by £792,283 or 107·94 per cent. Licenses and other taxes show an increase for the ten years of £9,356 or 9·43 per cent.

SECTION XXIII.—PUBLIC FINANCE—*continued.*

SUBSECTION C—PUBLIC DEBT.

EARLY in the history of the settlement of New Zealand the necessity for financial assistance to open up the forest-clad, rugged country was made apparent. In the year 1856 the first Loan Act was passed by the General Assembly, and under that authority £500,000 was raised. In addition to the requirements for necessary initial public works the opposition to settlement by the Maoris, resulting in active hostilities, compelled considerable borrowing. At the conclusion of the Maori war the work of road and railway construction was mainly carried on under the administration of Provincial Councils, who exercised control over expenditure within their respective districts, the General Government being responsible for undertakings of a national character. Under this system of divided responsibility no general and comprehensive scheme of public works could be carried out.

Up to the end of the year 1870 the General Government had borrowed £4,543,316, while the debt of the Provincial Councils amounted to £3,298,575. In that year the General Government brought forward a public works and immigration policy, by which it was proposed to raise a loan of ten millions for the construction of main trunk railways, roads, and other public works of importance to the country as a whole, as well as for the promotion of settlement on a large scale, the expenditure to be spread over a period of ten years. This policy was accepted by the Legislature, and embodied in the Immigration and Public Works Act, 1870. The necessity for local railways and other works soon caused the original proposals to be exceeded and to a far greater amount than was at first contemplated. Broadly stated, the system of opening up the lands in advance of settlement was adopted, the State retaining the ownership and control of facilities for transport and communication.

In 1892 the General Government began the repurchase of lands already alienated. The money required for this purpose has been borrowed, but the rentals obtained by the leasing of the lands are

sufficient for the payment of interest and sinking fund on the amount raised. In 1894 the Advances to Settlers Act was passed, authorizing the raising of loans for advances on the security of real estate. This was followed by the Advances to Workers Act in 1894. A considerable amount has been borrowed for these purposes, but both interest and sinking funds are derived from the special revenues, and thus are not a charge upon the Consolidated Fund. In order to assist local governing bodies to obtain money at low rates of interest the General Government has borrowed nearly five millions. Under this scheme the advances are repaid to the State by instalments.

The money composing the debt has been borrowed on the security of the public revenues. No portion of the public estate is pledged for payment of either principal or interest.

The Minister of Finance may raise loans when authorized by Parliament so to do, by the issue of debentures, or scrip, or stock, in New Zealand or elsewhere at his discretion, and may prescribe the mode and conditions of repayment of loans, the rates of interest (not exceeding the maximum rate fixed by the authorizing Act), and the times and places of the payment of principal and interest respectively. Power is given to convert debentures or scrip into consolidated stock, and the Minister may specify the terms of conversion at the time when a loan is raised, or arrange that terms shall be subsequently agreed upon. For the purpose of paying off or renewing at maturity any debenture, scrip, or other security, new debentures or other securities may be issued and disposed of if necessary. The purposes for which loans have been raised may be classed under four heads, viz. :—

- (a.) Business undertakings of the State,
- (b.) Investments,
- (c.) Indirectly productive public utilities, and
- (d.) Unproductive.

The amounts expended on or allocated to each item included in the above category to the 31st March, 1911, are as follows :—

EXPENDITURE OF PUBLIC DEBT.					
(a.) Reproductive,—				£	£
Railways	..	..	..	25,602,948	
Telegraphs and telephones	..	..	..	1,431,647	
Lighthouses and harbours	..	..	..	573,683	
Tourist and health resorts	..	..	..	131,507	
State fire insurance	..	..	..	2,000	
				-----	27,741,785

(b.) Investments,—

Purchase of land for settlements	6,303,485
Purchase of Native lands	2,461,167
Advances to settlers	6,974,935
Advances to workers	964,765
Loans to local bodies	4,882,000
Investment of N.-w Zealand consols	462,166
Bank of New Zealand preference shares	500,000
Reserve Fund securities	800,000
	23,348,518

(c.) Indirectly productive,—

Roads, bridges, and land-improvement	6,871,251
Immigration	2,463,002
Development of goldfields and coal-mines	987,598
	10,321,851

(d.) Unproductive,—

Public buildings	5,240,251
Maori war	2,357,000
Defence	2,783,727
Scenery-preservation	40,000
Deficiencies in revenue, charges, and expenses of raising loans, increase by conversion, &c., provincial liabilities, and miscellaneous	9,244,990
	19,665,968

Total £81,078,122

Only a portion of the expenditure of the Old Provincial Councils on railways became public debt. The total expenditure on railways of the Provincial and General Governments to the 31st March, 1911, was over thirty-one millions and a half sterling, which includes £1,104,281 spent by the Provincial Councils, £82,259 being for the Dunedin and Port Chalmers line.

In the above table any unexpended balances have been allocated to those purposes for which the loans were raised or to those purposes on which the money will be most probably expended. The proportion per cent. of each class to the total debt is as follows :—

Class.	Amount.	Percentage of total.
	£	
(a.) Reproductive expenditure	27,741,785	34.22
(b.) Investments	23,348,518	28.80
(c.) Indirectly productive expenditure	10,321,851	12.73
(d.) Unproductive expenditure	19,665,968	24.25
Total	81,078,122	100.00

The directly interest-earning portion represents 63.02 per cent. of the total debt, and is represented by assets which are of much greater value than the amount of borrowed money spent upon them, a considerable amount of surplus ordinary revenue having been expended from time to time on railways and other public services, as well as other moneys of the nature of special receipts.

The gross and net indebtedness of the General Government, amount of sinking fund accrued, and the rate of indebtedness per head of population, for each of the past twenty-one years, is given in the following table:—

31st March.	Estimated or Census Population.	Amount of Debentures and Stock in Circulation.	Gross In- debtedness per Head of European Population.	Amount of Sinking Fund accrued.	Net In- debtedness.	Net In- debtedness per Head of European Population.
		£	£ s. d.	£	£	£ s. d.
1891 ..	626,658	38,830,350	61 19 4	1,487,042	37,343,308	59 11 10
1892 ..	637,472	38,713,068	60 14 8	1,037,862	37,675,206	59 2 0
1893 ..	656,187	39,257,840	59 16 7	1,113,770	38,144,070	58 2 7
1894 ..	676,747	39,826,415	58 17 0	951,924	38,874,491	57 8 10
1895 ..	689,475	40,386,964	58 11 6	751,932	39,635,032	57 9 9
1896 ..	703,187	43,050,780	61 4 5	778,891	42,271,889	60 2 4
1897 ..	717,649	44,366,618	61 16 5	814,294	43,552,324	60 13 9
1898 ..	731,713	44,963,424	61 9 0	881,903	44,081,521	60 4 11
1899 ..	746,673	46,938,006	62 17 3	857,279	46,080,727	61 14 4
1900 ..	758,616	47,874,452	63 2 2	944,375	46,930,077	61 17 3
1901 ..	772,719	49,591,245	64 3 7	1,033,494	48,557,751	62 16 10
1902 ..	789,994	52,966,447	67 0 11	1,128,816	51,837,631	65 12 4
1903 ..	814,842	55,899,019	68 12 0	2,313,239	53,585,780	65 15 3
1904 ..	838,954	57,522,215	68 11 4	2,457,887	55,064,328	65 12 8
1905 ..	864,971	59,912,000	69 5 4	2,508,368	57,403,632	66 7 4
1906 ..	889,968	62,191,040	69 17 7	2,520,569	59,670,471	67 0 11
1907 ..	913,873	64,179,040	70 4 7	2,902,498	61,276,542	67 1 0
1908 ..	937,587	66,453,897	70 17 6	2,928,936	63,524,961	67 15 1
1909 ..	968,313	70,938,534	73 5 2	3,156,989	67,781,545	70 0 0
1910 ..	987,481	74,890,645	75 16 10	3,112,065	71,778,580	72 13 9
1911 ..	1,008,468	81,078,122	80 7 11	3,389,726	77,688,396	77 0 9

Since the year 1901-2, in addition to the customary deduction made for sinking funds accrued, there has been included the reserve funds of the State-guaranteed Advances Office. The gross debt is further reduced by taking off the amount of Government securities in which the New Zealand Consols deposits are invested, as both amounts appear in the table of the public debt. £500,000, the value of the preference shares held by the Government in the Bank of New Zealand, is also deducted. During the financial year 1907-8 debentures were issued for £800,000 to purchase securities to be held as a reserve to meet any unexpected financial contingency. The cost price of these securities (£800,000) has been included in the amount shown above as sinking fund.

The increase of the public debt during 1910-11 was £6,187,477.

Increase of Debt, 1891-1911.

The financial year 1890-91 has been selected as the basis of comparison, because that year marks the beginning of a period during which the functions of the State have been widely extended, most notably as regards financial assistance to settlers and workers, the repurchase of alienated lands, the working of coal-

mines, and the establishment of State fire and accident insurance offices. In every department these new activities, as well as the old, have been directly successful, while the indirect benefits, though admittedly great, are incapable of measurement.

While the annual interest-charge per head of population has not increased during the past twenty years, the burden is more easily borne owing to the increased proportion of producers in the population, and also to the greater ability of the taxpayer. A considerable portion of the annual interest on the debt, although paid out of the Consolidated Fund, does not fall upon the whole taxpaying community, the net revenue of the railways being sufficient to meet the interest on the money borrowed for their construction and equipment.

The increase of the gross public debt since the 31st March, 1891, amounts to £42,247,772. A schedule of items composing this sum is subjoined. It shows the purposes to which the money raised has been or is being devoted. One of the largest items is £6,974,935 raised for advances to settlers, which represents investments by the Government bearing interest and lent on continually improving security, the principal being repaid by instalments. Other items which may be considered as interest-bearing investments are those under the heads "Land-settlement," "Native-land purchases," "Loans to local bodies," "Lands improvement," "N.Z. Consols," "Advances to workers," "Bank of N.Z. preferred shares," and "Reserve Fund securities."

				£
Gross public debt, 31st March, 1911	..	..	81,078,122	
" " 31st March, 1891	..	..	38,830,350	
Increase	..	..	£42,247,772	
				£
Railways	..	..	11,022,948	
Advances to settlers	..	..	6,974,935	
Lands for settlements	..	..	6,303,485	
Loans to local bodies	..	..	4,557,000	
Public buildings	..	..	3,440,251	
Roads and bridges	..	..	1,765,251	
Defence	..	..	1,145,727	
Advances to workers	..	..	964,765	
Purchase of Native lands	..	..	915,167	
Reserve Fund securities	..	..	800,000	
Telegraph and telephone	..	..	662,647	
Bank of New Zealand shares	..	..	500,000	
New Zealand Consols	..	..	462,166	
Goldfields and coalfields development			416,598	
Tourist and health resorts	..	..	131,507	
Harbours and lighthouses	..	..	89,683	
Scenery-preservation	..	..	40,000	
Immigration	..	..	4,002	
State fire insurance	..	..	2,000	
Costs of raising loans, discounts, and conversion into stock, &c.	..	..	2,049,640	
				<u>42,247,772</u>

Character of Stock.

The whole of the public debt as stated in the foregoing tables comprises inscribed stocks and debentures with varying periods of currency. Treasury bills issued in anticipation of revenue have not been included in the total. The following table shows the relative increase of the different classes of securities during the past ten financial years:—

Year ended 31st March.	Inscribed Stock.	Debentures.	Total.	Treasury Bills outstanding not previously included.
	£	£	£	£
1902	43,812,750	9,153,697	52,966,447	700,000
1903	45,297,022	10,601,997	55,899,019	700,000
1904	45,302,842	12,219,373	57,522,215	700,000
1905	45,615,839	14,296,161	59,912,000	700,000
1906	47,306,029	14,885,011	62,191,040	700,000
1907	48,235,514	15,943,526	64,179,040	550,000
1908	48,869,405	17,584,492	66,453,897	400,000
1909	50,109,257	20,829,277	70,938,534	250,000
1910	51,364,868	23,525,777	74,890,645	100,000
1911	54,832,570	26,245,552	81,078,122	..

Flotation of Loans.

Until comparatively recent years the large proportion of the productive power of the Dominion diverted to the construction of railways, roads, &c., and engaged in the preparation of land for farming necessitated the borrowing of capital from abroad; but of late the accumulation of savings, chiefly of small sums deposited in the savings-banks, has enabled the Government to raise considerable amounts from time to time locally. Australian investors have greatly increased their investments in New Zealand securities within the last seven years. The following table shows the amount raised in London, Australia, and New Zealand for each of the past ten years:—

PUBLIC DEBT, WHERE RAISED.

Year ended 31st March.	Inscribed Stock.		Debentures.			Total.
	London.	New Zealand.	London.	Australia.	New Zealand.	
	£	£	£	£	£	£
1902	43,344,426	468,324	3,085,700	181,600	5,886,397	52,966,447
1903	44,824,466	472,556	3,067,900	568,100	6,965,997	55,899,019
1904	44,828,566	474,276	3,220,276	793,900	8,205,197	57,522,215
1905	45,140,105	475,734	4,239,514	1,209,550	8,847,097	59,912,000
1906	46,829,178	476,851	4,081,814	2,586,450	8,216,747	62,191,040
1907	47,757,279	478,235	3,830,514	3,087,850	9,025,162	64,179,040
1908	48,390,956	478,449	2,767,714	3,554,700	11,262,078	66,453,897
1909	49,630,684	478,573	5,000,414	3,869,800	11,959,063	70,938,534
1910	50,954,744	410,124	6,778,914	4,113,985	12,632,878	74,890,645
1911	54,370,404	462,166	7,851,414	4,213,985	14,180,153	81,078,122

The percentage of the total debt raised in each of the markets as in 1902 and 1911 was—

Market.				1902. Per Cent.	1911. Per Cent.
London	..	..	..	87·66	76·74
New Zealand	..	..	..	12·00	18·06
Australia	..	..	..	0·34	5·20
				100·00	100·00

This remarkable change in the relative positions of the State creditors may be partly ascribed to the ability of the mass of the wage-earning population in the Dominion to save, and to the general appreciation of the manner in which their savings are invested.

Dates of Maturity.

A summary of the loans outstanding on 31st March, 1911, showing the amounts falling due in each financial year, is given :—

Due Date: Year ending 31st March.	Amount. £	Due Date: Year ending 31st March.	Amount. £
1911*	450	1923	908,150
1912	2,366,491	1924	517,300
1913	4,913,204	1925	539,166
1914	777,700	1926	100,000
1915	4,943,365	1930	29,150,302
1916	4,270,202	1940	15,560,122
1917	1,670,240	1946	9,659,980
1918	699,200	1948	895,000
1919	133,000	1949	761,600
1920	78,000		
1921	807,700		£81,078,122
1922	2,326,950		

* Debentures not presented at due date.

The amounts that have matured or will mature during the current financial year, with their due dates, are as follows :—

£			Due		1911.
132,000	..	..	1st May,		
50,000	..	..	1st June,		
99,000	..	..	1st October,		
8,600	..	..	1st November,		
348,400	..	..	1st December,		
215,000	..	..	29th "		
1,098,015	..	..	1st January,	1912.	
85,000	..	..	15th "		
277,000	..	..	1st February,		
53,476	..	..	31st March,		
450	..	..	Debentures not presented.		
£2,366,941					

Interest.

Of the total amount of outstanding public debt at the end of March, 1911, more than forty millions bore interest at the rate of 4 per cent., over twenty-nine millions and a quarter at 3½ per

cent., and nearly ten millions at 3 per cent. The following are the rates of interest payable on the whole public debt:—

Rates of Interest.				Amount at each Rate.	
				£	
6	per cent.	..	..	..	15,200
5	per cent.	..	..	..	321,000
4½	per cent.	..	..	..	27,900
4	per cent.	..	..	..	40,192,893
3½	per cent.	..	..	..	1,507,700
3¼	per cent.	..	..	..	29,219,759
3	per cent.	..	..	..	9,793,670
Total				..	£81,078,122

The total amount of *interest* payable to bondholders on the full amount of the public debt as quoted above is £2,998,975, which gives an average rate of £3 14s. 0d. per £100. On the total public debt outstanding on the 31st March, 1891, the average interest charge was £4 10s. 3d. per £100. During the period 1891–1911, therefore, the average rate is found to have declined by 16s. 3d. per £100.

The foregoing refers to interest payable to bondholders only, and has nothing to do with sinking-fund requirements, which are included in the whole annual charge of the public debt.

The *actual payments* during seventeen years for interest and sinking fund out of the Consolidated Fund are shown in the following table, together with the rate per head of population and the percentage of ordinary and territorial revenue absorbed by the public-debt charges:—

Year ended 31st March.	Amounts actually paid for Interest and Sinking Fund out of the Consolidated Fund.					Rate per Head of Mean Population.	Percentage of Revenue absorbed by Public Debt Charges.
	Public Debt.			Treasury Bills.	Total		
	Interest.	Sinking Fund.	Total.	Interest.			
	£	£	£	£	£	£ s. d.	
1895 ..	1,619,925	57,979	1,677,904	38,985	1,716,889	2 10 3	38·96
1896 ..	1,602,933	41,183	1,644,116	39,659	1,683,775	2 8 4	36·96
1897 ..	1,630,577	41,858	1,672,435	37,034	1,709,469	2 8 2	35·62
1898 ..	1,668,697	43,380	1,712,077	29,336	1,741,413	2 8 1	34·28
1899 ..	1,689,749	44,651	1,734,400	33,068	1,767,468	2 7 10	33·61
1900 ..	1,674,618	46,073	1,720,691	28,703	1,749,394	2 6 6	31·07
1901 ..	1,671,552	46,364	1,717,916	27,700	1,745,616	2 5 6	29·83
1902 ..	1,722,819	47,724	1,770,543	33,396	1,803,939	2 6 2	29·80
1903 ..	1,817,701	50,464	1,868,165	32,814	1,900,979	2 7 5	29·77
1904 ..	1,875,376	53,408	1,928,784	29,179	1,957,963	2 7 4	27·89
1905 ..	1,914,296	54,933	1,969,229	24,500	1,993,729	2 6 10	27·38
1906 ..	2,006,537	56,167	2,062,704	24,500	2,087,204	2 7 7	27·52
1907 ..	2,048,990	97,351	2,146,341	25,751	2,172,092	2 8 2	25·86
1908 ..	2,085,018	81,842	2,166,860	20,559	2,187,419	2 7 3	24·15
1909 ..	2,149,739	91,438	2,241,177	17,188	2,258,365	2 7 5	25·09
1910 ..	2,282,182	95,124	2,377,306	20,156	2,397,462	2 9 0	25·95
1911 ..	2,381,000	54,104	2,435,104	23,348	2,458,452	2 9 3	23·87

NOTE.—The alteration made in 1894–95 of the system which previously obtained in dealing with the drawing loan of 1867 has affected the comparison of the later figures with those preceding. The total amount actually paid for interest and sinking fund in 1889–90 was, under the old system, £1,897,602. The figures for each of the years ending March, 1890 to 1894 inclusive, will be found in the Year-book for 1899.

The above amounts shown as interest and sinking fund do not comprise the whole of the interest and sinking fund paid by the Government in respect of moneys raised by way of loans. Thus, for loans raised under the Land for Settlements Acts, the Government Advances to Settlers and Workers Acts, and for the purchase of the Cheviot Estate, the interest, although made a charge upon the Consolidated Fund, is recovered from the receipts derived from the leasing of the lands, or from instalments paid by borrowers. The amount of interest thus charged and recovered during last year was £462,332 (under the Land for Settlements Acts, £224,143; Advances to Settlers and Workers Acts, £216,536; Cheviot Estate, £8,866; Local Authorities, £12,542; Native Land Settlement, £245). Such interest does not become a burden upon the taxpayer, and consequently is not included in the figures upon which the rate per head of mean population is calculated.

The amount actually paid for interest and sinking fund out of the Consolidated Fund during 1910-11 was £60,990 more than that for the previous year, and the rate of charge per head of population shows a slight increase.

Sinking Funds.

From time to time in the financial history of the Dominion sinking funds have been created in respect of various loans. Some of these funds have matured and been applied to their legitimate purposes; in other cases the pressing needs of the country justified their diversion to other and comparatively more useful purposes. Of the existing funds one, attached to a loan of £15,200 borrowed under the Canterbury Loan Ordinance, 1862, now amounts to £21,640, and one, to provide for a loan of £266,300, under The New Zealand Loan Act, 1863, amounts to £226,802. The first-mentioned loan matures partly in 1915 and partly in 1916, and the last-mentioned in 1914. More recently provision was made for the repayment of loans raised for local bodies and for war and defence purposes. The whole of these funds are invested.

Another class of sinking fund may more correctly be termed an "internal reserve fund," because the accumulations are immediately converted into capital, although kept apart in the accounts. These are funds belonging to the State-guaranteed Advances Office, consisting of an annual contribution out of the surplus revenue equal to 1 per cent. of the loan liabilities of the office in each financial year. On the 31st March, 1911, the following was the position of the various funds and reserves:—

Purpose.	Amount accrued.
	£
Under the Canterbury Loan Ordinance, 1862 ..	21,640
Under the New Zealand Loan Act, 1863 ..	226,802
Loans to local bodies	799,601
War and defence loans	192,691
State-guaranteed advances	518,752
	£1,754,486

As a further set-off against the gross public debt, there is an investment of £500,000 in Bank of New Zealand preference shares, £800,000 in practically liquid securities held as an emergency fund, and £335,240 of New Zealand Consols invested in securities of the New Zealand Government. Adding these three amounts to the total of the funds previously enumerated, the deduction made in order to arrive at the net indebtedness may thus be stated:—

Sinking funds	£	1,754,486
Investment funds		1,635,240
		£3,389,726

The nature of the investment of the accrued sinking funds, excluding the State-guaranteed Advances Fund, is shown in the following table:—

STATEMENT of the SECURITIES in which the SINKING FUNDS of the several LOANS were invested on the 31st March, 1911.

Investments in—	£	s.	d.
New Zealand 5-per-cent. Debentures	3,470	0	0
New Zealand 4½-per-cent. Debentures	1,700	0	0
New Zealand 4-per-cent. Debentures	136,231	0	0
New Zealand 3¾-per-cent. Debentures	7,600	0	0
New Zealand 3½-per-cent. Debentures	2,310	0	0
New Zealand 4-per-cent. Inscribed Stock ..	129,754	19	6
New Zealand 3½-per-cent. Inscribed Stock ..	24,823	6	3
New Zealand 3-per-cent. Inscribed Stock ..	19,809	9	2
New Zealand Consols, 4 per cent.	595	0	0
New South Wales 3-per-cent. Inscribed Stock ..	4,386	18	4
Victoria 3-per-cent. Inscribed Stock	1,429	4	1
Tasmania 3-per-cent. Inscribed Stock	6,645	15	1
Queensland 4-per-cent. Inscribed Stock	1,433	8	8
Bank of New Zealand Guaranteed Stock, 4 per cent.	4,800	0	0
Cape of Good Hope 3½-per-cent. Stock	1,500	0	0
India 3½-per-cent. Stock	19,516	11	2
Straits Settlement 3½-per-cent. Stock	4,902	12	6
County of Tauranga 5-per-cent. Debentures	60	0	0
Borough of Brunner 6-per-cent. Debentures	990	0	0
Borough of Palmerston North 4½-per-cent. Debentures	530	0	0
Borough of Patea 4½-per-cent. Debentures	420	0	0
Borough of Tauranga 5-per-cent. Debentures	200	0	0
Westport Harbour Board 4-per-cent. Debentures ..	660	0	0
Waimakariri-Ashley Water-supply Board 5-per-cent. Debentures	320	0	0
Mortgages	374,088	4	9
In common fund, Public Trustee, at 4 per cent. (on account Loans to Local Bodies debentures, &c.)	31,550	0	0
Cash balance, 31st March, 1911	798,500	12	0
Total	£1,240,733	9	7

Of the total amount, £13,895 is represented by stock and debentures of the Australian States, and £25,919 by those of India, Africa, and Straits Settlement; £326,294 was invested in similar securities of the New Zealand Government; £3,180 in debentures of various local governing bodies; other securities, £4,800; £31,550 on mortgage; and £798,501 is in the hands of the Public Trustee.

New Sinking Fund.

A scheme making provision to repay the existing public debt, with application to future borrowings was embodied in the Public Debt Extinction Act, 1910, and consists in setting apart each year out of the revenue of the Consolidated Fund an amount, not being a fixed percentage for each loan, but based upon an actuarial calculation of the sum required to be invested each year at compound interest at 4 per cent. per annum for seventy-five years. For every loan raised in the future an additional proportional amount will be contributed to the fund to enable such new loan to be extinguished at the expiry of seventy-five years from the date of issue.

The fund is to be administered by a Board constituted under the Act, and must be invested in loans to settlers, to workers, and to local authorities. It is expressly forbidden to invest any of the moneys in New Zealand Government securities. If at any time the funds cannot be invested as above stated, the Board may purchase at or below par, and cancel, any New Zealand Government stock or debentures charged upon the consolidated revenue. In order to preserve the continuity of the fund it is provided that in the event of any stock or debentures being redeemed before the expiry of the seventy-five years there shall be paid annually out of the Consolidated Fund into the Sinking Fund Account a sum sufficient to compensate for the loss of earnings of the money so expended. There is also a provision that if the earnings of the fund should fall below 4 per cent., any deficiency must be made good out of the Consolidated Fund Account.

The accumulated sinking funds of the war and defence and local bodies' loans are to remain under the administration of the Public Trustee, as invested by him at present. The initial contribution to the new fund is £144,885, and this amount will be provided as follows :—

	£
Present contributions of the Consolidated Fund to the war and defence loans and local bodies' loans ..	92,308
Earnings of the accrued sinking funds of the war and defence loans and local bodies' loans	39,691
Additional payment from the Consolidated Fund ..	12,886
	£144,885

The annual payment will be increased, (a) for every new loan, by an amount needed to extinguish it in seventy-five years; (b) in case the fund at any time fails to earn 4 per cent., by an amount which will supply the deficiency.

The most prominent features of the scheme are the mode of investment, which is intended to prevent any improper use being made of the accumulations; the provision for preserving the continuity of the fund by the adjustment of the annual contributions;

and the automatic action of the fund whereby the total debt will be extinguished in seventy-five years from any date on which the liability exists.

Prices of New Zealand Stock.

The highest and lowest London prices for the New Zealand 4, 3½, and 3 per cent. stock, taken over a range of twenty years, are quoted:—

QUOTATIONS, NEW ZEALAND STOCK.

Year.	4-per-cent. (1929)		3½-per-cent. (1940)		3-per-cent. (1945)	
	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.
1891	107½	100	98½	91½	..	..
1892	106½	100	98	91½	..	..
1893	107½	97	97½	90	..	..
1894	109½	105½	103½	96½	..	..
1895	113½	105½	107½	100	95½	91
1896	118½	106½	110½	101½	103½	90
1897	117	112½	111	104½	102	99½
1898	116½	108	109½	103	101½	96½
1899	116½	105½	109	102	99½	94½
1900	113½	109	106½	103½	98½	95½
1901	115½	110½	109½	104½	99½	93½
1902	113½	109	109½	102½	97	93½
1903	110½	105	104½	99½	96	88
1904	107½	104½	101½	96½	90	86½
1905	110½	105½	100½	97½	89½	89½
1906	110½	104½	102½	98½	91½	87½
1907	108½	103½	101	98	89½	84
1908	109½	105½	101	98½	90½	85½
1909	108½	104½	99½	97½	88½	85½
1910	106½	103	99	94½	88½	84½

Public Debt of Australasia.

The following figures show the public debt of each State of the Australian Commonwealth on 30th June, 1910, and of New Zealand on 31st March, 1910:—

State.	Fixed Debt.		Floating Debt.	Total Public Debt.	Amount per Head of Population.		
	Debentures.	Inscribed Stock.					
	£	£	£	£	£	s.	d.
New South Wales ..	3,780,950	86,584,808	2,159,337	92,525,095	56	6	1
Victoria ..	6,018,249	43,201,616	6,356,860	55,576,725	42	9	4
Queensland ..	13,980,580	29,165,487	1,130,000	44,276,067	75	1	11
South Australia ..	2,866,400	24,685,620	3,835,850	31,387,870	75	3	8
Western Australia ..	405,500	22,164,953	717,000	23,287,453	83	7	2
Tasmania ..	2,714,250	7,797,410	58,793	10,570,453	57	12	10
Total, Commonwealth	29,765,929	213,599,894	14,257,840	257,623,663	58	5	2
New Zealand ..	23,525,777	51,364,868	..	74,890,645	75	16	10

With the exception of Queensland each of the above States and New Zealand had accumulated sinking funds to set against the gross debt shown above, making in some cases an appreciable difference in the amount per head. The net indebtedness per head of population is as follows:—

				£	s.	d.
New South Wales	..	..	..	56	2	1
Victoria	..	..	..	41	16	4
Queensland	..	..	..	75	1	11
South Australia	..	..	..	73	12	2
Western Australia	..	..	..	74	3	3
Tasmania	..	..	..	55	11	11
Commonwealth	..	..	..	57	3	7
New Zealand	..	..	..	72	13	9

In three States the net liability per head is greater than that of New Zealand.

SECTION XXIV.—SHORT SUMMARY OF LEGISLATION PASSED DURING THE SESSION OF 1911.

1911, No. 5.—THE FRIENDLY SOCIETIES AMENDMENT ACT, 1911.

THIS Act (which is designed for the protection of members of friendly societies) provides that no friendly society or branch is to be registered after the 1st January, 1912, until a certificate has been given by a qualified actuary that the benefits promised are sufficiently provided for by the rates of contribution set forth in the proposed rules.

A further amendment is made by section 3 with respect to the investment of moneys belonging to registered societies. That section provides that no advance is to be made in respect of the mortgage of lands in excess of two-thirds of the value of the security. Under the principal Act advances could not be made in excess of three-fifths of the unimproved value of the security together with half the value of the improvements.

1911, No. 6.—THE MENTAL DEFECTIVES ACT, 1911.

This Act marks an important legislative advance with respect to the care, treatment, and classification of mentally defective persons. In large measure it gives effect to the recommendation of the recent Imperial Royal Commission on the Care and Control of the Feeble-minded. The Lunatics Act, 1908 (which was merely a consolidation of prior enactments, dating back to the year 1882), is repealed.

The following matters are worthy of special reference :—

(1.) The definition of “mentally defective person,” in section 2, classifies those persons into six divisions, dependent upon the nature and severity of the complaint to which the patient is subject. These divisions are : Class I, persons of unsound mind ; Class II, persons mentally infirm ; Class III, idiots ; Class IV, imbeciles ; Class V, feeble-minded ; Class VI, epileptics. This classification is that recommended by the Royal Commission above referred to. Persons coming within any of the above classes are not necessarily to be confined in institutions under the Act, but only in cases where their detention is required for their own welfare and in the public interest.

(2.) Much more efficient provision is made in the machinery provisions of the Act for the committal of mentally defective persons to institutions, and special provisions are made for the ready admission of such persons in cases of sudden attack or other cases demanding speedy attention.

(3.) Part II deals with "single patients"—that is to say, persons who are, on the authority of a Magistrate and after examination, permitted to remain in the custody and under the control of a private person.

(4.) Part III relates exclusively to the special procedure to be adopted in the case of the committal to an institution of minors. Such persons may be received on the declaration of a parent or guardian, supported by medical certificates, to the effect that detention is necessary, and may be discharged on a similar application, unless further detention is deemed necessary.

(5.) Part V relates to "voluntary boarders," and is an important departure from the earlier law. It permits of the detention of a person in an institution on his personal application to be placed under control and treatment. Such a patient may be again discharged on his own application in that behalf, the only restriction being that he may be detained for seven days after the receipt of such an application. This provision is extremely valuable in cases where a person is aware of an impending attack of insanity and wishes to effectively place himself beyond the risk of inflicting harm on himself or others.

(6.) The remaining provisions of the Act deal principally with the effective administration of public and licensed institutions for mentally defective persons, and for the treatment and control of the persons detained therein.

1911. No. 7.—THE HUTT RAILWAY AND ROAD IMPROVEMENT AMENDMENT ACT, 1911.

This Act amends the Hutt Railway and Road Improvement Act, 1903, which provide for the distribution of the cost of the new Hutt Road. Since the passing of the original Act several new local authorities have been constituted within the area affected, and the purpose of the present Act is merely to provide for a proportion of the cost being borne by those local authorities.

1911, No. 8.—THE ADMINISTRATION AMENDMENT ACT, 1911.

This Act makes the following amendments of the Administration Act, 1908:—

(1.) Section 2 exempts the Imperial Public Trustee from the obligation to give security on the resealing of letters of administration in New Zealand.

(2.) Section 3 allows an executor to demand that a claimant against an estate be obliged to institute legal proceedings in respect of a disputed claim within three months of the refusal by the executor to recognize the claim. If such proceedings are not commenced the Supreme Court may bar the claim.

(3.) Section 4 provides that, upon the filing in the Court of applications for the administration of estates by persons other than the

Public Trustee, the following information shall be supplied to the Public Trustee :—

- (a.) Date of filing and of hearing ;
- (b.) Name of deceased ;
- (c.) Whether testate or intestate, and date of will (if any).

This provision is rendered necessary by reason of the increase in the work of the Public Trustee in respect of the preparation and custody of the wills of private persons.

1911, No. 9.—THE DEATH DUTIES AMENDMENT ACT, 1911.

This Act makes several amendments of the Death Duties Act, 1909. *Inter alia*, it extends the exemption in respect of gift duty and succession duty. Section 8 provides that no duty shall be payable on any gift which (together with any gift made within twelve months by the same donor to the same beneficiary) does not exceed £1,000. The former exemption was in respect of gifts of £500, made within six months. Section 10 exempts from the payment of succession duty successions not exceeding £200 in value.

1911, No. 11.—THE RATING AMENDMENT ACT, 1911.

This Act provides for the extension of the system of rating on the unimproved value to water, gas, electric-light, sewage, hospital, and other rates to which that system was not applied by the principal Act.

1911, No. 13.—THE NEW ZEALAND STATE-GUARANTEED ADVANCES AMENDMENT ACT, 1911.

This authorizes the expenditure of £750,000 instead of £500,000 per annum for the purpose of providing advances to workers under the principal Act.

1911, No. 14.—THE OLD-AGE PENSIONS AMENDMENT ACT, 1911.

This Act removes certain difficulties and hardships which have arisen in the administration of the principal Act. It also extends the right to receive a pension to a man of sixty years of age, or a woman of fifty-five years, having two children under fourteen years of age dependent on him or her. Under the principal Act the minimum pension-age is sixty-five years. The maximum pension provided for by this amendment may exceed the ordinary pension by not more than £13 (that is, may amount to £39 per annum).

1911, No. 15.—THE AID TO PUBLIC WORKS AND LAND SETTLEMENT ACT, 1911.

This Act authorizes a loan of £1,500,000, to be allocated as follows :—

- (1.) Construction of Railways, £500,000.
- (2.) Purchase of rolling-stock, £300,000,
- (3.) Land settlement and goldfields development, £500,000.
- (4.) Other public works, £200,000.

1911, No. 16.—THE WIDOWS PENSIONS ACT, 1911.

This Act authorizes the payment of pensions to widows in indigent circumstances and having dependent upon them any legitimate child or children born in New Zealand and under fourteen years of age. The rate of pension varies in proportion to the number of children so dependent upon the recipient, as follows:—

(a.) For one child ..	£12	Less £1 for every £1 of income in excess of £30 per annum.
(b.) For two children ..	£18	
(c.) For three children ..	£24	
(d.) For four or more children	£30	

For the purposes of the Act, the "term" income does not include personal earnings up to an amount which, with the pension under the Act, equals £100 per annum.

The right to receive a pension is dependent upon the sober habits and the good moral character of the applicant.

Section 18 provides for the payment of a pension to a person other than the pensioner in trust for the benefit of her and her children, in cases where the Commissioner (of Old-age Pensions), having regard to the age, infirmity, improvidence, or other special circumstances of the pensioner, thinks it expedient that a personal payment should not be made.

The machinery provisions are identical with those of the old-age Pensions Act.

1911, No. 17.—THE PATENTS, DESIGNS, AND TRADE-MARKS ACT, 1911.

This Act repeals the Patents, Designs, and Trade-marks Act, 1908, (with the exception of certain sections relating to offences in respect of trade-marks), and adopts, with the necessary modifications, the provisions of the Imperial and Commonwealth Acts relating to the same matters.

The following are the most important of the material alterations of the law effected by the new Act:—

Patents.

Section 29 enables the Supreme Court to make an order permitting the manufacture or carrying-on in New Zealand of a patented article or process on being satisfied that the patentee is not causing that article or process to be manufactured or carried on to an adequate extent in New Zealand. No such order is to be made within four years of the date of the patent, nor does it authorize the importation into New Zealand of a patented article in breach of the provisions of the patent.

Section 40 makes more stringent the prohibition of contracts by which the purchaser, lessee, or licensee of a patented article or process is restrained from using or purchasing any article or process not the property of the patentee. Such contracts and others of a similar

character are declared to be null and void as being in restraint of trade and contrary to public policy.

More effective provision is made by sections 26 to 29, compelling a patentee to issue licenses with respect to patented inventions, or, in the alternative, for the revocation of those patents.

Designs.

The most important amendment relating to designs is the extension of the term of copyright. Under the Act of 1908 the copyright expired on five years from registration; the present Act permits of two renewals, each for five years, thus allowing a total period of fifteen years during which the design may be protected.

1911, No. 18.—THE EDUCATION RESERVES AMENDMENT ACT, 1911.

This Act makes several amendments of the principal Act. *Inter alia*, it declares the trustees of high schools under that Act to be leasing authorities within the meaning of the Public Bodies' Leases Act, 1908, thus extending the leasing-powers of those trustees with respect to the reserves and endowments controlled by them.

1911, No. 19.—THE LEGISLATURE ACT, 1911.

This Act is designed to overcome certain difficulties arising in the course of the compilation of the electoral rolls. It also makes provision for the conduct of the national prohibition poll.

Section 6 further provides that in all electoral districts in which a second poll is to be taken, that poll shall be taken on the seventh day after the taking of the first poll.

1911, No. 20.—THE LOCAL ELECTIONS AND POLLS AMENDMENT ACT, 1911.

This Act authorizes voters at local election polls to record their votes after the hour fixed for the closing of the poll if they were present in the polling-booth for the purpose of voting before the time so fixed.

1911, No. 21.—THE PUBLIC WORKS AMENDMENT ACT, 1911.

This Act provides for the control by the Public Works (instead of by the Postal) Department of the licensing, &c., of electric lines for power purposes.

Provision is also made for the execution of irrigation agreements between the Minister of Public Works and the occupier or owner of land in districts where the Minister has constructed irrigation-works. Such agreements run with the land in respect of which they are made, either during the currency of the lease of the land to which they relate or until the expiration of the agreement by effluxion of time.

Section 9 exempts from the operations of part XIII of the Land Act, 1908 (relating to limitation of area), land received in exchange for roads or other public purposes, or lands constituting closed or stopped roads. Various other amendments of the principle Act are made.

1911, No. 22.—THE TRAMWAYS AMENDMENT ACT, 1911.

This Act makes numerous minor amendments of the Tramways Act, 1908. *Inter alia*, it excludes the holders of licenses granted by local authorities from the right to receive service certificates as motormen on electric trams unless those holders can also comply with the requirements as to actual service as motormen.

Section II provides that all new cars constructed or used for the first time after the 1st January, 1912, are to have a central aisle or passage-way through their length. This section is designed principally for the protection of tram-conductors.

1911, No. 23.—THE GOVERNMENT RAILWAYS AMENDMENT ACT, 1911.

This Act provides for considerable increases in the rates of wages receivable by the men in the employ of the Government Railways Department.

1911, No. 24.—THE POST AND TELEGRAPH AMENDMENT ACT, 1911.

This Act provides :—

(a.) For the extension of the use of machines for recording stamp-values on documents requiring to be stamped ; and

(b.) For the issue of licenses by the Minister of Telegraphs for the installation of wireless-telegraphy apparatus on ships registered in New Zealand.

1911, No. 25.—THE PUBLIC RESERVES AND DOMAINS AMENDMENT ACT, 1911.

This Act extends the leasing-powers of local authorities and trustees in respect of public reserves vested in them. It authorizes the execution of leases for twenty-one years, with a single right of renewal for a further period of twenty-one years.

1911, No. 26.—THE RAILWAYS AUTHORIZATION ACT, 1911.

This Act authorizes the construction of the various lines of railway specified in the schedule thereto.

1911, No. 27.—THE REPRESENTATION COMMISSIONS' REPORTS VALIDATION ACT, 1911.

This Act defines the boundaries of the four city licensing districts—a matter inadvertently omitted from the report of the Representation Commissions.

1911, No. 28.—THE PUBLIC SERVICE CLASSIFICATION AND SUPER-ANNUATION AMENDMENT ACT, 1911.

This Act provides as follows :—

(1.) For the better administration of the Public Service Superannuation Fund. In pursuance of section 2, all contributions are made payable in the first place into the Post Office Account, and all outgoings are paid from that account. The balance only is paid to

the Public Trustee, and forms part of the common fund of the Public Trust Office. Interest will be paid on this balance in accordance with the regulations from time to time governing the common fund. Under the former system moneys belonging to this fund were frequently held over awaiting special investment in terms of the Act. The estimated saving to the fund in administration expenses and in additional interest is estimated at £750 per annum.

(2.) Section 6 permits the transfer of officers from any branch of the Government Service other than the Civil Service to the Civil Service; such transfers are to be made only in accordance with regulations, and after not less than ten years' service, and only to a position similar to that held by the person proposed to be transferred.

(3.) Section 7 provides for a right of appeal by teachers against transfers. Such appeal is to be to the Teachers' Court of Appeal established under the Education Act, 1908.

1911, No. 31.—THE MILITARY PENSIONS ACT, 1911.

This Act authorizes the grant of military pensions in lieu of old-age pensions to persons who have served His Majesty as soldiers in any war.

1911, No. 32.—THE MINING AMENDMENT ACT, 1911.

This Act makes various amendments of the Mining Act. In particular, it extends the provisions of that Act so as to make provision for mining for, and for the storage of, mineral oils and natural gases.

Section 10 also authorizes the Public Trustee to expend moneys out of the Gold-miners' Relief Fund towards the maintenance or relief of miners suffering from pneumoconiosis, or the families of such persons.

1911, No. 33.—THE INDUSTRIAL CONCILIATION AND ARBITRATION AMENDMENT ACT, 1911.

This Act amends in various particulars the provisions of the Industrial Conciliation and Arbitration Act, 1908. The most important amendments are the following:—

(1.) Section 3 makes provision for an industrial agreement being transformed by the Court into an Industrial award in cases where that agreement is binding on the employers who employ a majority of the workers in the industry to which it relates.

(2.) Section 4 provides for the extension of an award to two or more industrial districts; and section 6 provides for the making of Dominion awards, the operation of which extends throughout the whole of New Zealand.

1911, No. 34.—THE WORKERS' COMPENSATION AMENDMENT ACT, 1911.

This Act amends in various particulars the Workers' Compensation Act, 1908. *Inter alia*, it extends the benefits of the Act to persons employed in domestic service.

1911, No. 35.—THE SHIPPING AND SEAMEN AMENDMENT ACT, 1911.

This Act (which has been reserved for the signification of His Majesty's pleasure thereon) makes better provision for the welfare of seamen left on shore in New Zealand by reason of illness or accident. This amendment replaces section 119 of the principal Act, the interpretation of which was very doubtful, and had been made the subject of adverse criticism by the Supreme Court.

Section 9 enacts that bills of lading or other documents relating to contracts for the carriage of goods from New Zealand are to be governed by the law of New Zealand for the time being in force, notwithstanding any agreement to the contrary by the parties.

STATISTICAL VIEW OF FIFTY YEARS' PROGRESS IN NEW ZEALAND, 1861-1910.

I.—POPULATION.

Year.	Population (exclusive of Maoris and for Annexed Pacific Islands) on 31st December.			Births.	Deaths.	Marriages.
	Males.	Females.	Totals.			
1861	61,062	37,959	99,021	3,441	1,109	878
1862	79,680	46,132	125,812	4,064	1,231	1,091
1863	105,978	58,070	164,048	5,115	1,983	1,485
1864	106,580	65,578	172,158	6,501	2,921	1,878
1865	117,376	73,231	190,607	7,490	2,757	1,908
1866	125,080	79,034	204,114	8,466	2,540	2,038
1867	131,929	86,739	218,668	8,918	2,702	2,050
1868	134,621	91,997	226,618	9,391	2,662	2,085
1869	140,112	97,137	237,249	9,718	2,721	1,931
1870	145,732	102,668	248,400	10,277	2,703	1,851
1871	156,431	110,555	266,986	10,592	2,642	1,864
1872	162,404	117,156	279,560	10,795	3,192	1,873
1873	170,406	125,540	295,946	11,222	3,645	2,276
1874	194,349	147,511	341,860	12,844	4,161	2,828
1875	213,294	162,562	375,856	14,438	5,712	3,209
1876	225,580	173,495	399,075	16,168	4,904	3,196
1877	227,681	180,937	408,618	16,856	4,685	3,114
1878	240,627	191,892	432,519	17,770	4,645	3,377
1879	257,894	205,835	463,729	18,070	5,583	3,352
1880	268,364	216,500	484,864	19,341	5,437	3,181
1881	274,986	225,924	500,910	18,732	5,491	3,277
1882	283,303	234,404	517,707	19,009	5,701	3,600
1883	294,665	246,212	540,877	19,202	6,061	3,612
1884	306,667	257,637	564,304	19,846	5,740	3,800
1885	312,125	263,101	575,226	19,693	6,081	3,813
1886	317,646	271,740	589,386	19,299	6,135	3,488
1887	324,558	278,803	603,361	19,135	6,137	3,563
1888	324,948	282,432	607,380	18,902	5,708	3,617
1889	328,588	287,464	616,052	18,457	5,772	3,632
1890	332,557	292,951	625,508	18,278	5,994	3,797
1891	336,174	297,884	634,058	18,273	6,518	3,805
1892	345,146	305,287	650,433	17,876	6,459	4,002
1893	357,635	314,630	672,265	18,187	6,767	4,115
1894	363,763	322,365	686,128	18,528	6,918	4,178
1895	369,725	328,981	698,706	18,546	6,863	4,110
1896	376,987	337,175	714,162	18,612	6,432	4,843
1897	384,703	344,353	729,056	18,737	6,595	4,928
1898	392,124	351,339	743,463	18,955	7,244	5,091
1899	398,679	357,826	756,505	18,835	7,680	5,461
1900	403,628	364,650	768,278	19,546	7,200	5,860
1901	414,223	373,434	787,657	20,491	7,634	6,095
1902	425,908	382,021	807,929	20,555	8,375	6,394
1903	439,674	392,831	832,505	21,829	8,528	6,748
1904	453,992	403,547	857,539	22,766	8,087	6,983
1905	467,366	415,096	882,462	23,682	8,061	7,200
1906	481,651	427,075	908,726	24,252	8,339	7,592
1907	492,649	436,835	929,484	25,094	10,066	8,192
1908	510,329	450,313	960,642	25,940	9,043	8,339
1909	520,406	462,520	982,926	26,524	8,959	8,094
1910	529,928	472,751	1,002,679	25,984	9,639	8,236

NOTE.—Maori population excluded from above was 47,731 in 1906, and that of Cook and other Islands 12,340 persons

II.—LAND AND STOCK.

Year.	Occupied and Cultivated Holdings over One Acre in Extent.	Land (including Sown Grasses) under Cultivation.	Live-stock.			
			Horses.	Horned Cattle.	Sheep.	Pigs.
	Number.	Acres.				
1861	..	226,621	28,275	193,285	2,761,383	43,270
1862	..	..	..	..	..	..
1863	..	..	..	..	..	..
1864	..	382,655	49,409	249,760	4,937,273	61,276
1865	..	..	..	..	..	..
1866	..	..	..	..	..	..
1867	..	676,909	65,715	312,835	8,418,579	115,104
1868	..	..	..	..	..	..
1869	11,932	783,435	..	..	..	..
1870	13,476	997,477	..	..	..	..
1871	10,211	1,140,279	81,028	436,592	9,700,629	151,460
1872	14,874	1,226,222	..	..	..	..
1873	15,304	1,416,933	..	..	..	..
1874	15,883	1,651,712	99,859	494,917	11,704,853	123,921
1875	16,092	1,943,653	..	..	..	..
1876	17,250	2,377,402	..	..	..	..
1877	18,750	2,940,711	..	..	..	..
1878	20,519	3,523,277	137,768	578,430	13,069,338	207,337
1879	21,054	3,982,866	..	..	..	..
1880	23,129	4,506,889	..	..	..	..
1881	24,147	4,768,192	161,736	698,637	12,985,085	200,083
1882	26,298	5,189,104	..	..	..	..
1883	27,352	5,651,255	..	..	..	..
1884	28,587	6,072,949	..	..	..	..
1885	29,814	6,550,399	..	..	..	..
1886	31,763	6,668,920	187,382	853,358	16,564,595	277,901
1887	33,332	6,845,177	..	..	..	..
1888	34,743	7,284,752	..	..	..	..
1889	35,747	7,670,167	..	..	..	..
1890	38,178	8,015,426	..	..	..	..
1891	38,083	8,462,495	211,040	788,919	17,865,423	222,553
1892	41,224	8,893,225	..	..	18,570,752	..
1893	42,768	9,713,745	..	..	19,380,369	..
1894	45,290	10,063,051	..	385,305	20,230,829	..
1895	46,676	10,128,076	..	964,034	19,826,604	..
1896	..	10,698,869	237,418	1,047,901	19,138,493	239,778
1897	58,940	11,550,075	249,813	1,138,067	19,687,954	209,834
1898	60,759	11,444,563	252,834	1,209,165	19,673,725	186,027
1899	61,639	11,984,606	258,115	1,203,024	19,348,506	193,512
1900	62,485	12,474,511	261,931	1,222,139	19,355,195	249,751
1901	62,786	12,636,035	266,245	1,256,680	20,233,099	250,975
1902	63,982	13,083,971	279,672	1,361,784	20,342,727	224,024
1903	65,034	13,357,700	286,955	1,460,663	18,954,553	193,740
1904	66,092	13,504,004	298,714	1,593,547	18,280,806	226,591
1905	68,680	13,868,074	314,322	1,736,850	19,130,875	255,320
1906	69,942	14,114,925	326,537	1,810,936	20,108,471	249,727
1907	72,338	14,382,787	342,608	1,851,750	20,983,772	242,273
1908	73,367	14,884,617	352,832	1,816,299	22,449,053	241,128
1909	75,152	15,566,308	363,259	1,773,326	23,480,707	245,092
1910	*	*	*	*	24,269,620	*

* Not ascertained.

III.—TRADE.

Exports (the Produce of New Zealand).

Year.	Wool.		Grain.		Frozen Meat.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lb.	£	Bushels.	£	Cwt.	£
1861	7,855,920	523,728	8,118	2,518	..	..
1862	9,839,265	674,226	6,602	1,821	..	..
1863	12,585,980	830,495	3,238	1,160	..	..
1864	16,691,666	1,070,997	3,580	722	..	..
1865	19,180,500	1,141,761	25,447	6,076	..	..
1866	22,810,776	1,354,152	32,610	7,297	..	..
1867	27,152,966	1,580,608	158,811	26,986	..	..
1868	28,875,163	1,516,548	632,556	114,125	..	..
1869	27,765,636	1,371,230	520,556	96,441	..	..
1870	37,039,763	1,703,944	854,399	141,135	..	..
1871	37,793,734	1,606,144	1,032,902	164,087	..	..
1872	41,886,997	2,537,919	1,058,480	178,886	..	..
1873	41,535,185	2,702,471	598,431	136,832	..	..
1874	46,848,735	2,834,695	1,162,782	291,103	..	..
1875	54,401,540	3,398,155	1,276,927	231,417	..	..
1876	59,853,454	3,395,816	2,172,098	337,878	..	..
1877	64,481,324	3,658,938	1,323,910	276,452	..	..
1878	59,270,256	3,292,807	2,112,214	508,767	..	..
1879	62,220,810	3,126,439	3,470,344	660,557	..	..
1880	66,860,150	3,169,300	5,540,445	898,997	..	..
1881	59,415,940	2,909,760	5,815,960	986,072	..	..
1882	65,322,707	3,118,554	4,310,984	907,961	15,244	19,339
1883	68,149,430	3,014,211	6,723,303	1,286,724	87,975	118,328
1884	81,139,028	3,267,527	5,489,635	766,824	254,069	345,090
1885	86,507,431	3,205,275	4,597,645	513,697	296,473	373,857
1886	90,853,744	3,072,971	3,523,324	463,549	346,055	427,193
1887	88,824,382	3,321,074	4,126,836	443,780	402,107	455,870
1888	83,225,733	3,115,008	5,101,167	668,859	552,298	628,800
1889	102,227,354	3,976,375	6,120,202	985,224	656,822	783,374
1890	102,817,077	4,150,599	8,287,024	1,030,415	898,894	1,087,617
1891	106,187,114	4,129,686	5,877,059	676,338	1,000,307	1,194,724
1892	118,180,912	4,313,307	6,625,525	816,272	869,600	1,033,377
1893	109,719,684	3,774,738	4,855,368	583,397	903,836	1,085,167
1894	144,295,154	4,827,016	2,434,295	226,183	1,025,243	1,194,545
1895	116,015,170	3,662,131	2,381,837	215,783	1,134,097	1,262,711
1896	129,151,624	4,391,848	2,941,821	346,197	1,103,362	1,251,993
1897	135,835,117	4,443,144	1,919,887	235,429	1,407,921	1,566,286
1898	149,385,815	4,645,804	1,045,980	136,120	1,551,773	1,698,750
1899	147,169,497	4,324,627	6,985,999	721,817	1,865,827	2,088,856
1900	140,706,486	4,749,196	9,529,847	1,034,014	1,844,831	2,123,881
1901	146,820,079	3,699,103	13,373,515	1,285,811	1,857,547	2,253,262
1902	160,419,023	3,354,563	5,865,562	786,548	2,138,557	2,718,763
1903	155,128,381	4,041,274	5,362,748	533,865	2,378,650	3,197,043
1904	144,647,376	4,673,826	3,775,978	392,346	1,912,979	2,793,599
1905	139,912,737	5,381,333	2,282,853	294,574	1,690,684	2,694,432
1906	154,384,568	6,765,655	1,006,825	139,474	2,025,507	2,877,031
1907	171,635,595	7,657,278	229,593	53,205	2,354,808	3,420,664
1908	162,518,481	5,332,781	1,114,332	143,223	2,120,303	3,188,515
1909	189,683,703	6,305,888	6,951,926	823,149	2,572,604	3,601,093
1910	204,368,957	8,308,410	1,985,616	319,073	2,654,196	3,850,777

III.—TRADE—continued.

Exports (the Produce of New Zealand)—continued.

Year.	Butter.		Cheese.		Phormium Fibre.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Cwt.	£	Cwt.	£	Tons.	£
1861	25	126	404	1,844	2	43
1862	Butter and cheese not separately given for years 1862 to 1865. The total export for this period was 617 cwt., value £2,976				13	261
1863					13	251
1864					7	170
1865					3	75
1866	232	1,590	13	65	45	996
1867	38	192	90	362	126	4,256
1868	138	532	335	1,240	534	8,137
1869	2,705	14,679	2,331	8,040	2,028	45,245
1870	3,435	12,995	2,735	9,327	5,471	132,578
1871	4,342	12,426	1,619	4,023	4,248	90,611
1872	1,629	4,462	1,362	4,379	3,985	99,405
1873	722	2,342	1,993	6,625	6,454	143,799
1874	357	1,168	1,326	4,408	2,038	37,690
1875	104	660	442	1,862	639	11,742
1876	871	3,910	885	3,488	897	18,285
1877	5,206	23,458	4,999	16,713	1,053	18,826
1878	3,106	12,111	3,019	9,368	622	10,666
1879	339	1,631	172	628	445	7,874
1880	2,717	8,350	717	1,983	894	15,617
1881	2,426	8,496	3,056	6,112	1,308	26,285
1882	11,264	52,088	3,553	10,130	2,040	41,955
1883	8,869	42,020	2,519	6,892	2,013	36,761
1884	15,766	66,593	10,342	25,074	1,525	23,475
1885	24,923	102,387	15,245	35,742	1,063	16,316
1886	23,175	105,537	16,429	45,657	1,112	15,922
1887	17,018	54,921	23,913	54,562	1,578	25,094
1888	29,995	118,252	36,682	78,918	4,042	75,269
1889	37,955	146,840	26,558	67,105	17,084	361,182
1890	34,816	122,701	40,451	84,986	21,158	381,789
1891	39,430	150,258	39,770	86,675	15,809	281,514
1892	53,930	227,162	41,493	91,042	12,793	214,542
1893	58,149	254,645	46,201	99,626	12,587	219,375
1894	60,771	251,280	55,655	115,203	4,677	66,256
1895	57,964	227,601	76,743	150,909	1,806	21,040
1896	71,353	281,716	71,372	130,166	2,968	32,985
1897	99,002	402,605	77,683	150,517	2,769	30,674
1898	96,801	403,690	68,711	135,776	4,850	74,556
1899	136,086	571,799	69,440	141,818	10,371	184,411
1900	172,583	740,620	102,849	229,111	15,906	332,182
1901	201,591	882,406	104,294	238,685	10,171	195,728
1902	253,998	1,205,802	74,746	163,539	20,852	534,031
1903	285,106	1,318,067	74,780	194,998	22,652	595,684
1904	314,360	1,380,460	84,526	185,486	26,936	710,281
1905	305,722	1,408,557	88,562	205,171	27,877	666,467
1906	320,225	1,560,235	131,206	341,002	27,779	776,106
1907	328,441	1,615,345	236,833	662,355	28,547	832,068
1908	229,971	1,171,182	280,798	783,419	17,403	396,288
1909	321,108	1,639,380	400,607	1,105,390	14,318	306,973
1910	356,535	1,811,975	451,915	1,195,373	20,645	448,414

III.—TRADE—*continued.*Exports (the Produce of New Zealand)—*continued.*

Year.	Gold.		Gum (Kauri).		Provisions, Tallow, Timber, &c.
	Quantity.	Value.	Quantity.	Value.	Value.
	Oz.	£	Tons.	£	£
1861	194,234	752,657	856	9,888	48,437
1862	410,862	1,591,389	1,103	11,107	77,835
1863	628,450	2,431,723	1,400	27,027	52,105
1864	480,171	1,857,847	2,228	60,590	59,089
1865	574,574	2,226,474	1,867	46,060	82,729
1866	735,376	2,844,517	2,535	70,572	116,901
1867	686,753	2,700,275	2,685	77,491	89,294
1868	637,474	2,504,326	2,690	72,493	51,361
1869	614,281	2,362,995	2,850	111,307	80,197
1870	544,880	2,157,585	4,391	175,074	212,044
1871	730,029	2,787,520	5,054	167,958	338,335
1872	445,370	1,730,992	4,811	154,167	396,976
1873	505,337	1,987,425	2,833	85,816	412,660
1874	376,388	1,505,331	2,568	79,986	397,762
1875	355,322	1,407,770	3,230	138,523	285,715
1876	318,367	1,268,559	2,888	109,234	351,731
1877	366,955	1,476,312	3,632	118,348	469,670
1878	311,437	1,244,190	3,445	132,975	573,735
1879	284,100	1,134,641	3,228	147,535	484,150
1880	303,215	1,220,263	4,725	242,817	544,973
1881	250,683	996,867	5,460	253,778	574,880
1882	230,893	921,664	5,533	260,369	921,290
1883	222,899	892,445	6,518	336,606	1,121,257
1884	246,392	988,953	6,393	342,151	1,116,799
1885	222,732	890,056	5,876	299,762	1,154,819
1886	235,578	939,648	4,920	257,653	1,058,552
1887	187,938	747,878	6,790	362,434	1,085,468
1888	229,608	914,309	8,482	380,933	1,274,780
1889	197,492	785,490	7,519	329,590	1,606,828
1890	187,641	751,360	7,438	378,563	1,440,731
1891	251,161	1,007,172	8,388	437,056	1,436,671
1892	237,393	951,963	8,705	517,678	1,200,525
1893	227,502	915,921	8,317	510,775	1,113,799
1894	221,614	887,865	8,338	404,567	1,112,233
1895	293,493	1,162,181	7,425	418,766	1,269,031
1896	263,694	1,041,428	7,126	431,323	1,269,680
1897	251,647	980,204	6,641	398,010	1,389,398
1898	280,175	1,080,691	9,905	586,767	1,562,834
1899	389,570	1,513,180	11,116	607,919	1,645,313
1900	373,614	1,439,602	10,159	622,293	1,784,350
1901	455,558	1,753,784	7,541	446,114	1,935,567
1902	507,852	1,951,426	7,430	450,223	2,333,704
1903	533,314	2,037,832	9,357	631,102	2,288,327
1904	520,323	1,987,501	9,203	501,817	1,976,471
1905	520,485	2,093,936	10,883	561,444	2,167,616
1906	563,843	2,270,904	9,154	522,486	2,587,453
1907	508,210	2,027,490	8,708	579,888	2,934,845
1908	506,381	2,004,799	5,530	372,798	2,501,525
1909	506,371	2,006,900	8,250	552,698	3,112,465
1910	478,286	1,896,318	8,693	465,044	3,648,779

III.—TRADE—continued.

Year.	Exports (the Produce of New Zealand).	Imports.		Coal-mines, Output from.
	Total Value.	Total Value.	From United States (included in previous Column).	
	£	£	£	Tons.
1861	1,339,241	2,493,811	26,790	Prior to 1878, 709,931
1862	2,358,020	4,626,082	89,806	
1863	3,342,891	7,024,674	109,998	
1864	3,050,634	7,000,655	109,222	
1865	3,503,421	5,594,977	45,084	
1866	4,396,090	5,894,863	129,300	
1867	4,479,464	5,344,607	92,590	
1868	4,268,762	4,985,748	117,326	
1869	4,090,134	4,976,126	69,109	
1870	4,544,682	4,639,015	60,497	
1871	5,171,104	4,078,193	59,345	
1872	5,107,186	5,142,951	90,657	
1873	5,477,970	6,464,687	143,273	
1874	5,152,143	8,121,812	191,539	
1875	5,475,844	8,029,172	213,492	
1876	5,488,901	6,905,171	192,287	
1877	6,058,717	6,973,418	269,656	
1878	5,784,619	8,755,663	432,572	162,218
1879	5,563,455	8,374,585	438,399	231,218
1880	6,102,300	6,162,011	238,011	299,923
1881	5,762,250	7,457,045	343,645	337,262
1882	6,253,350	8,609,270	463,493	378,272
1883	6,855,244	7,974,038	419,250	421,764
1884	6,942,486	7,663,888	348,557	480,831
1885	6,591,911	7,479,921	401,532	511,063
1886	6,386,682	6,759,013	337,322	534,353
1887	6,551,081	6,245,515	298,736	558,620
1888	7,255,128	5,941,900	323,069	613,895
1889	9,042,008	6,308,863	342,436	586,445
1890	9,428,761	6,260,525	355,395	637,397
1891	9,400,094	6,503,849	361,795	668,794
1892	9,365,868	6,943,056	381,627	673,315
1893	8,557,443	6,911,515	379,378	691,548
1894	9,085,148	6,788,020	394,691	719,546
1895	8,390,153	6,400,129	394,233	726,654
1896	9,177,336	7,137,320	492,840	792,851
1897	9,596,267	8,055,223	628,044	840,713
1898	10,324,988	8,230,600	800,411	907,033
1899	11,799,740	8,739,633	775,309	975,234
1900	13,055,249	10,646,096	1,061,873	1,093,990
1901	12,690,460	11,817,915	1,415,260	1,227,638
1902	13,498,599	11,326,723	1,318,937	1,362,702
1903	14,838,192	12,788,675	1,441,358	1,420,193
1904	14,601,787	13,291,694	1,527,915	1,537,838
1905	15,503,530	12,828,857	1,438,501	1,585,756
1906	17,840,346	15,211,403	1,405,781	1,729,536
1907	19,783,138	17,302,861	1,425,596	1,831,009
1908	15,894,530	17,471,284	1,643,937	1,860,975
1909	19,462,936	15,674,719	1,166,063	1,911,247
1910	21,944,163	17,051,583	1,399,737	2,197,362

IV--TRANSPORT.

Year.	Shipping.		Registered Vessels belonging to New Zealand.
	Inwards. Tonnage.	Outwards. Tonnage.	Gross Tonnage.
1861	197,986	205,350	9,144
1862	301,365	288,647	10,825
1863	419,935	394,665	15,189
1864	426,004	433,253	22,573
1865	295,625	283,020	24,484
1866	330,303	306,979	26,787
1867	309,568	308,169	23,240
1868	277,105	287,710	24,539
1869	250,731	247,764	25,990
1870	273,151	265,407	26,743
1871	274,643	265,618	27,107
1872	300,302	285,366	23,963
1873	289,297	281,847	30,035
1874	399,296	385,533	38,935
1875	416,727	417,820	42,025
1876	393,180	393,334	44,401
1877	388,568	400,609	42,479
1878	456,490	428,493	46,965
1879	473,940	475,752	64,457
1880	395,675	424,041	66,316
1881	420,134	413,487	72,387
1882	461,285	438,551	76,196
1883	494,926	507,565	84,903
1884	529,188	534,242	92,666
1885	519,700	513,000	95,887
1886	502,572	488,331	94,196
1887	489,754	493,583	94,027
1888	526,435	531,478	86,132
1889	602,634	593,252	87,411
1890	662,769	649,705	98,907
1891	618,515	625,807	102,068
1892	675,223	656,100	101,156
1893	615,604	642,466	100,388
1894	631,100	631,250	99,588
1895	672,951	648,946	100,988
1896	614,097	627,659	105,553
1897	686,899	675,333	119,713
1898	765,255	765,793	126,113
1899	811,183	807,866	129,583
1900	854,632	825,275	137,767
1901	1,063,274	1,075,906	143,183
1902	1,089,179	1,048,770	147,822
1903	1,102,064	1,113,165	150,909
1904	1,154,569	1,144,764	157,334
1905	1,139,410	1,141,552	170,957
1906	1,243,652	1,238,214	180,124
1907	1,254,266	1,225,382	197,001
1908	1,361,047	1,331,305	228,399
1909	1,263,935	1,253,878	230,614
1910	1,389,031	1,367,207	233,531

IV.—TRANSPORT—*continued.*

Year.	Government Railways, (Figures to 31st March following.)			Electric Telegraph.		
	Miles open for Traffic.	Miles under Con- struction.	Railway Receipts.	Miles of Line.	Number of Messages.	Cash and Cash Values, including Telephones.
			£			£
1861	..	..	..	..	..	..
1862	..	..	..	..	..	..
1863	..	..	..	..	..	..
1864	..	..	..	..	..	..
1865	..	..	..	..	..	..
1866	..	..	..	699	48,231	9,114
1867	..	..	..	714	87,436	14,295
1868	..	..	..	1,471	134,647	26,224
1869	..	..	..	1,611	173,746	32,649
1870	..	..	..	1,887	238,195	27,422
1871	..	..	..	2,015	369,085	37,203
1872	..	..	..	2,312	491,205	44,669
1873	145	434	..	2,389	637,941	55,195
1874	209	621	21,198	2,632	844,301	62,322
1875	542	464	72,073	3,156	993,323	74,420
1876	718	427	469,051	3,170	1,100,599	80,841
1877	1,052	251	569,898	3,307	1,182,955	85,589
1878	1,089	142	758,096	3,434	1,260,324	92,433
1879	1,171	284	762,572	3,512	1,448,943	112,351
1880	1,288	192	836,077	3,758	1,304,712	100,023
1881	1,333	187	892,026	3,824	1,438,772	101,566
1882	1,371	171	953,347	3,974	1,570,189	102,378
1883	1,404	224	961,304	4,074	1,599,400	102,958
1884	1,479	158	1,045,712	4,264	1,654,305	101,482
1885	1,613	179	1,047,418	4,463	1,774,273	112,778
1886	1,721	171	998,768	4,546	1,836,266	115,666
1887	1,753	169	994,843	4,646	1,835,394	116,211
1888	1,777	163	997,615	4,790	1,765,860	104,116
1889	1,809	176	1,095,569	4,874	1,802,987	106,462
1890	1,842	132	1,121,701	5,060	1,961,161	110,697
1891	1,869	170	1,115,432	5,349	1,968,264	117,634
1892	1,886	188	1,181,522	5,479	1,904,143	103,813
1893	1,948	148	1,172,792	5,513	2,069,791	112,466
1894	1,993	127	1,150,851	5,823	2,046,839	114,510
1895	2,014	114	1,183,041	6,245	2,124,211	123,112
1896	2,018	124	1,286,158	6,285	2,520,169	129,635
1897	2,055	92	1,376,008	6,484	2,696,233	136,221
1898	2,090	113	1,469,665	6,736	2,960,738	145,295
1899	2,104	111	1,623,891	6,910	3,469,631	162,945
1900	2,212	208	1,727,236	7,249	3,898,128	186,978
1901	2,235	212	1,874,586	7,469	4,167,981	207,476
1902	2,291	194	1,974,038	7,749	4,559,304	222,495
1903	2,328	175	2,180,641	7,779	4,965,197	237,564
1904	2,374	173	2,209,231	7,944	5,159,745	250,063
1905	2,407	222	2,349,704	8,355	5,640,219	273,911
1906	2,458	208	2,624,600	8,953	6,396,332	307,521
1907	2,474	255	2,761,938	9,656	7,042,923	344,251
1908	2,674	188	2,929,526	10,404	7,425,693	369,353
1909	2,717	184	3,249,790	10,901	7,846,890	394,510
1910	2,753	192	3,494,182	11,316	8,360,647	434,116

V.—ACCUMULATION.

Year.	Banks. (Average of Four Quarters.)			Savings-Banks (Post Office and private).		Post Office Money, Orders issued.	
	Deposits.	Assets.	Liabilities.	Number of Depositors.	Balance to credit on 31st Dec.	Number.	Amount.
	£	£	£		£		£
1861	882,754	1,235,952	1,097,162	1,144	22,921	..	..
1862	1,596,446	2,691,117	2,092,497	1,496	29,768	1,410	6,590
1863	2,092,090	4,028,766	2,962,585	2,371	44,117	11,586	55,703
1864	2,480,303	5,063,458	3,343,172	4,669	94,248	16,591	78,556
1865	2,638,414	5,455,289	3,522,146	4,304	87,400	17,236	78,576
1866	3,097,473	5,891,532	4,010,110	4,513	91,863	22,710	108,779
1867	2,904,594	5,947,160	3,737,695	6,579	156,855	24,473	115,610
1868	3,102,727	5,734,745	3,838,220	8,121	243,615	25,854	118,211
1869	3,174,831	6,231,416	3,863,006	10,103	320,383	28,427	127,218
1870	3,127,769	6,315,354	3,819,670	12,137	388,804	31,864	140,454
1871	3,334,672	5,871,888	3,988,400	14,275	454,966	36,291	157,397
1872	3,919,838	5,429,747	4,628,819	17,289	597,002	44,660	191,009
1873	4,713,806	7,267,720	5,538,030	21,807	812,144	52,351	219,258
1874	5,564,434	9,954,216	6,490,504	27,215	943,753	62,712	263,164
1875	5,967,205	10,987,178	6,987,318	30,310	897,326	73,027	293,481
1876	6,238,471	11,776,070	7,221,399	32,577	905,146	80,255	310,268
1877	7,185,106	12,992,104	8,152,230	35,709	964,430	90,672	334,973
1878	8,960,369	15,393,630	10,031,009	39,926	1,043,204	101,017	368,255
1879	8,021,073	16,054,295	9,057,463	42,679	990,337	117,999	428,673
1880	8,538,935	14,220,275	9,550,177	47,462	1,148,992	135,648	465,405
1881	9,069,377	14,863,645	10,083,188	61,054	1,549,515	135,556	452,182
1882	8,945,346	17,162,234	10,015,273	68,358	1,832,047	148,162	499,368
1883	8,659,477	17,794,761	9,706,700	73,546	1,784,631	172,556	541,133
1884	9,643,214	18,442,139	10,691,599	79,514	1,926,759	186,052	572,666
1885	10,083,296	18,811,567	11,130,244	85,769	2,142,560	188,622	581,395
1886	10,579,711	19,041,827	11,603,194	91,296	2,133,861	155,680	547,755
1887	11,031,614	18,799,847	11,995,495	97,496	2,407,776	159,579	555,744
1888	11,155,778	18,709,444	12,108,353	103,046	2,691,693	162,387	555,996
1889	11,528,424	17,652,915	12,486,717	110,566	2,858,644	172,076	589,545
1890	12,368,610	17,735,259	13,356,598	118,344	3,137,023	176,427	602,077
1891	12,796,098	16,814,518	13,820,458	126,886	3,406,949	195,239	651,990
1892	13,587,062	17,558,168	14,623,335	135,827	3,580,544	199,438	694,847
1893	14,433,777	18,255,534	15,489,633	147,199	3,966,849	210,957	750,929
1894	13,927,217	17,746,421	14,930,791	154,405	4,066,594	222,678	776,783
1895	13,544,415	18,159,781	14,491,627	163,513	4,620,696	243,497	812,604
1896	14,490,827	16,900,199	15,520,431	175,173	5,065,864	269,566	902,160
1897	14,290,512	17,276,771	15,380,248	187,954	5,520,080	293,659	970,831
1898	14,143,229	17,013,404	15,299,058	199,464	5,746,887	318,370	1,029,241
1899	14,591,223	17,190,433	15,834,858	213,172	6,128,297	344,664	1,118,808
1900	15,570,610	17,314,535	16,964,582	228,883	6,665,344	369,834	1,214,853
1901	16,034,848	18,422,274	17,490,035	245,024	7,268,103	405,967	1,286,508
1902	17,231,767	18,999,180	18,701,063	261,948	7,876,877	367,207	1,277,059
1903	19,011,114	19,913,546	20,563,879	280,011	8,432,958	396,312	1,416,224
1904	19,074,960	20,893,096	20,643,359	297,569	8,839,307	407,783	1,476,887
1905	20,545,601	21,770,525	22,144,166	316,376	9,773,954	417,441	1,541,712
1906	22,422,243	23,829,933	24,143,008	341,114	11,170,025	439,020	1,686,232
1907	23,517,111	26,584,239	25,334,348	364,422	12,825,063	441,487	1,773,591
1908	21,821,753	29,098,567	23,611,903	388,945	13,512,266	488,084	2,050,684
1909	21,996,621	26,937,265	23,728,326	408,770	14,065,410	538,740	2,307,593
1910	24,968,761	26,398,927	26,742,081	432,119	15,620,515	569,657	2,457,523

V.—ACCUMULATION—continued.

Year.	Insurances in Force in the Government Life Insurance Department at End of Year.		Old-age Pensions, 31st March of following Year.		Friendly Societies from which Returns received.		Public Trust Office.	
	No. of Policies.	Sums Assured and Bonuses.	No. of Pensions in Force.	Amount represented.	No. of Lodges, &c.	No. of Members.	Number of Estates.	Value of Estates.
		£		£				£
1861	..	..	..	..	..	..	..	..
1862	..	..	..	..	..	..	..	..
1863	..	..	..	..	..	..	..	..
1864	..	..	..	..	..	..	..	..
1865	..	..	..	..	..	..	..	..
1866	..	..	..	..	..	..	..	..
1867	..	..	..	..	..	..	..	..
1868	..	..	..	..	..	..	..	..
1869	..	..	..	..	..	..	..	..
1870	59	30,250	..	..	..	..	..	..
1871	454	200,611	..	..	..	..	..	..
1872	1,689	625,421	..	..	..	..	..	..
1873	2,634	995,986	..	..	..	..	257	17,500
1874	3,953	1,453,496	..	..	..	..	293	28,930
1875	4,989	1,836,859	..	..	..	..	347	42,163
1876	6,153	2,282,129	..	..	89	8,560	412	59,720
1877	7,149	2,716,907	..	..	88	8,828	575	67,675
1878	8,711	3,251,220	..	..	110	9,759	627	73,940
1879	10,223	3,726,330	..	..	138	13,165	713	96,315
1880	11,656	4,171,504	..	..	179	14,484	770	117,980
1881	12,411	4,471,182	..	..	272	18,634	836	150,750
1882	15,892	5,273,164	..	..	273	18,700	911	204,545
1883	19,917	5,992,111	..	..	275	18,848	1,024	317,680
1884	21,003	6,224,571	..	..	281	21,144	1,082	392,315
1885	23,218	6,552,242	..	..	302	22,794	1,190	457,620
1886	24,715	7,053,276	..	..	290	21,679	1,293	576,010
1887	25,439	7,136,944	..	..	347	24,928	1,304	715,860
1888	26,168	7,362,488	..	..	353	24,938	1,483	954,675
1889	27,218	7,600,537	..	..	365	26,013	1,561	1,130,960
1890	28,102	7,807,792	..	..	357	26,379	1,678	1,240,097
1891	29,226	8,390,803	..	..	364	27,372	1,825	1,252,625
1892	30,316	8,580,817	..	..	379	28,754	1,912	1,284,745
1893	31,709	8,821,255	..	..	372	29,763	2,022	1,450,918
1894	32,907	9,232,543	..	..	369	29,963	*	*
1895	33,968	9,345,229	..	..	376	30,905	2,086	1,562,269
1896	34,772	9,415,693	..	..	392	31,825	2,236	1,806,953
1897	36,174	9,857,010	..	..	388	32,670	2,334	1,868,163
1898	37,848	10,124,227	7,443	128,082	410	35,501	2,413	1,950,314
1899	39,366	10,341,702	11,285	193,718	433	38,202	2,491	2,110,316
1900	40,368	10,639,978	12,405	211,965	443	40,257	2,667	2,192,594
1901	41,291	10,627,263	12,776	217,192	445	41,236	2,898	2,326,954
1902	42,406	11,024,734	12,481	211,595	462	43,408	3,049	2,467,614
1903	43,116	11,111,807	11,926	200,915	465	45,255	3,314	2,706,785
1904	44,194	11,261,080	11,770	199,081	479	47,302	3,470	3,152,882
1905	45,137	11,725,977	12,582	313,018	501	51,103	3,685	3,577,355
1906	45,981	11,851,491	13,257	326,084	535	53,759	3,977	4,009,992
1907	46,945	11,980,123	13,569	323,340	552	56,817	4,276	4,590,157
1908	47,033	12,024,699	14,396	353,343	539	58,517	4,718	4,065,989
1909	48,016	12,447,748	15,320	374,699	567	64,428	4,946	4,644,795
1910	48,932	12,586,798	16,020	403,020	609	68,006	5,466	5,184,840

* From here figures are for yearended 31st March.

VI.—EDUCATION.

Year.	Scholars at Primary Schools.	Scholars at Secondary or High Schools.	Scholars at Private Schools.	New Zealand University Graduates (Direct Degrees).
1861	..	..	..	..
1862	..	..	..	..
1863	..	..	..	..
1864	..	..	..	..
1865	..	..	..	..
1866	..	..	..	..
1867	..	..	..	..
1868	..	..	..	..
1869	..	..	..	..
1870	..	..	..	..
1871	..	..	..	..
1872	..	..	..	..
1873	..	..	..	..
1874	38,215	..	8,237	..
1875	45,562	..	7,316	..
1876	51,964	654	9,357	..
1877	56,239	716	9,992	..
1878	65,040	868	9,206	..
1879	75,556	1,417	10,234	..
1880	82,401	1,631	11,238	..
1881	83,560	1,819	9,987	..
1882	87,179	1,899	10,002	..
1883	92,476	2,384	11,255	..
1884	97,238	2,642	12,203	..
1885	102,407	2,659	11,989	103
1886	106,328	2,358	12,497	117
1887	110,919	2,242	13,417	145
1888	112,685	2,120	13,893	168
1889	115,456	2,147	13,458	199
1890	117,912	2,117	13,626	230
1891	119,523	2,205	14,142	279
1892	122,620	2,262	14,456	323
1893	124,690	2,251	14,922	366
1894	127,300	2,454	14,627	410
1895	129,856	2,525	14,659	464
1896	131,037	2,614	13,947	501
1897	132,197	2,709	14,447	546
1898	131,621	2,706	14,782	603
1899	131,315	2,723	15,295	641
1900	130,724	2,792	15,555	699
1901	131,351	2,899	15,344	757
1902	132,262	3,072	15,624	814
1903	133,568	3,722	15,609	869
1904	135,475	4,038	16,378	929
1905	137,623	4,060	16,639	992
1906	139,302	4,270	17,131	1,033
1907	141,071	4,196	18,088	1,157
1908	147,428	6,327	18,367	1,252
1909	152,416	7,063	17,930	1,327
1910	156,324*	7,970†	18,981	1,424

* In addition to these there were in December, 1910, 4,280 children attending the Native Schools, nearly all maintained by the Government, and 1,012 at Industrial Schools and Orphanages.

† Including 2,794 secondary pupils attending Technical Day Schools.

NOTE.—Statistics of schools and scholars not being complete for years prior to 1874, no figures are entered.

PART III.—ARTICLES ON SPECIAL SUBJECTS.

SECTION I.

THE LAND SYSTEM OF NEW ZEALAND.

[By WILLIAM C. KENSINGTON, I.S.O., Under-Secretary of Lands.]

THE Crown lands of New Zealand are administered under the Land Act, 1908, and the Land for Settlements Act, 1908, together with the regulations made thereunder.

The distinguishing features of the present leasehold system involve the principle of State ownership of the soil, with a tenant right to recurrent terms of lease by the occupier. Between 1892 and 1907 a very large proportion of the Crown lands were disposed of on lease for 999 years. The rentals were based on the assessed value of the land at the time of disposal, without increase or recurring valuations, and gave a fixity of tenure practically equal to freehold, and which, like freehold, necessarily carried with it the power of sale, sub-lease, mortgage, or disposition by will. At the same time the improvements made in the soil by cultivation, &c., were secured to the tenant should he from any cause be obliged to forfeit or surrender his lease. This tenure was amended by the Land Laws Amendment Act, 1907, which substituted a lease for sixty-six years (in the case of *ordinary* Crown lands) and thirty-three years (in the case of *settlement* lands), with a perpetual right of renewal for further successive terms. The former Acts of 1892, 1893, 1895, and 1907 are now consolidated in the Land Act, 1908.

When it is taken into consideration that, with few exceptions, the Crown lands are, in their prairie condition, incapable of immediate profitable use, the advantage to the settler of setting free his capital to develop the capabilities of the soil, rather than having to expend it in the purchase of a freehold, is very apparent.

The values placed on the Crown lands are, as a rule, low, for the State does not so much seek to raise a revenue directly therefrom as to encourage the occupation of the lands by the people; this occupation secures an indirect increased revenue, besides the other advantages resulting from a numerous rural population.

Again, underlying the whole of the New Zealand land system is a further application of the principle of "the land for the people"—viz., the restriction in area which any man may hold. This subject has been forced upon the attention of the Legislature by defects in

former systems, under which one individual with means at his command could appropriate large areas, to the exclusion of his less wealthy fellow-settler. Under existing conditions, where the price at which land is offered is definitely fixed, and where choice of selection is by ballot, every would-be settler has the same chance, and may hold under the Crown an equal area of land, except that by the Land Act, 1908, preference is given to "landless," "married," and "previously unsuccessful" applicants. The quantity that a selector may hold is so fixed as to encourage the class of moderate farmers, for up to the statutory limit the amount he may select is left almost entirely to himself. The Act defines the amount of land any one may hold at 640 acres of first-class land, 2,000 acres of second-class land, or 5,000 acres of third-class land. These limits apply to lands which are thrown open for optional selection, but in some cases, where the quality of the land is very good and the selectors many, the limit may by regulation be made smaller.

Part XIII of the Land Act, 1908, deals with the limitation of area to be held by private persons, and tends to prevent the aggregation of estates of lands which may hereafter be acquired from the Crown. It distinctly limits such holdings to 5,000 acres, and gives power to inflict penalties for any evasion of the Act.

In addition to the many advantages offered by the *renewable-lease* tenure, the Land Act provides others, to meet the wants of different classes. The general rule is that ordinary Crown land thrown open for *optional selection* is offered to the public under three different tenures, the choice of which is left to the would-be settler.

The three tenures are:—

- (1.) Cash, in which one-fifth of the purchase-money is paid down at once, and the remainder within thirty days. The final title is not given until certain improvements have been made on the land.
- (2.) Lease with a purchasing clause, at a 5-per-cent. rental on the value of the land; the lease being for twenty-five years, with the right to purchase at the original upset price at any time after the first ten years and within twenty-five years, or to convert into a renewable lease.
- (3.) Renewable lease, at a rental of 4 per cent. on the capital value, the lease being for sixty-six years with perpetual right of renewal.

"Settlement" lands are opened only on renewable lease, the term being for thirty-three years instead of sixty-six years, and the rental $4\frac{1}{2}$ per cent. on capital value.

The Land Act, 1908, provides for a special class of settlement called *small-farm associations*, which found favour with the public to a very considerable extent during the first three years after the Act of 1892 came into force, but is now superseded to a large

extent by the improved-farm settlement system. The small-farm association system provides that, where not less than twelve individuals have associated themselves together for mutual help, such an association can, with the approval of the Minister of Lands, select a block of land for subdivision and settlement, but not more than 250,000 acres may be set aside in any one year. The extreme limit that one person may hold is fixed at 500 acres. Settlements of this class were formerly held on lease in perpetuity, in a similar way to lands under the same tenure when thrown open for optional selection, but this is now superseded by the renewable-lease tenure. The conditions of residence and improvement are the same. The system offers many advantages to the settler, so long as the blocks of land are judiciously chosen, having regard to quality of land, access, markets, and the probability of employment being obtained in the neighbourhood. In the eagerness to obtain lands on such easy terms these points have, in the past, not received sufficient attention by some of the associations, and in consequence they are not all successful. At present only a very small proportion of the remaining Crown lands is suitable for selection in this manner.

Under the Land Act, 1885, there was a somewhat similar system, but it allowed of the acquisition of the freehold. This was taken advantage of to a considerable extent by selectors under that Act.

The *village-settlement* system of New Zealand has excited much inquiry. This system provides for the setting apart and offering for optional selection of allotments of one acre in area or under, and for the opening under the renewable-lease tenure (formerly lease in perpetuity) of small farms between 1 and 100 acres in area. These settlements were designed to enable labourers to obtain homes for themselves and families in the immediate vicinity of their work, and gave bushmen, workers on the roads and railways, &c., an excellent chance of securing a holding upon which they could live, and which they could improve in their spare time. There has not been any great extension of this system in recent years.

The *improved-farm settlement* system was first begun in order to find work for the unemployed. Considerable areas of forest-clad Crown lands were set aside, and small contracts for the clearing, burning, and sowing these with grass were let to the men to whom it was intended to allot them. In most cases the farms are selected or balloted for in their primitive state, and the settler is for a time paid for the improvements he makes, or, in other words, the cost of converting forest lands into grass lands is advanced from time to time by the Government. In other cases a piece of forest land is taken in hand, and men are employed at fixed rates in felling, burning, and grassing. When so much grass is laid down as will give a good start, the land is opened for selection in sections of 50 to 200 acres and balloted for among the applicants. The farms are let on lease with a purchasing clause or on renewable lease (formerly lease in

perpetuity) at a rental sufficient to cover the cost of clearing, &c., together with a fair rental of the land.

The size of holdings averages about 120 acres.

Full details as to the various tenures now in force, and the conditions to be complied with by selectors of Crown land, are given in the following pages.

DIGEST OF THE LAND LAWS.

Administration.

The Crown lands are administered, under the authority of the Land Act, 1908, by the Hon. the Minister of Lands at Wellington, his executive officer being the Under-Secretary of Lands, who is the permanent head of the Department of Lands and Survey. For convenience New Zealand is divided into ten land districts, each being under the local direction of a Commissioner of Crown Lands and a Land Board. The Commissioner's office is known as the principal land office, and in some of the larger districts there are one or more local land offices. It is with these land offices the selector has to transact all business, from the first consultation of the maps to the final receipt of the Crown title.

Land Board.

A Land Board consists of five members, of whom the Commissioner of Crown Lands for the district is *ex officio* chairman, three members nominated by the Governor, and one member elected by the Crown tenants of the district.

Land Districts and Principal Land Offices.

The names of the land districts and of the towns where each principal office is situated are, beginning with the most northerly and taking them geographically, as under:—

Land District.	Town where Principal Land Office is situated.	Land District.	Town where Principal Land Office is situated.
Auckland	.. Auckland.	Marlborough	.. Blenheim.
Taranaki	.. New Plymouth.	Westland	.. Hokitika.
Hawke's Bay	.. Napier.	Canterbury	.. Christchurch.
Wellington	.. Wellington.	Otago	.. Dunedin.
Nelson	.. Nelson.	Southland	.. Invercargill.

HEAD OFFICE .. Wellington.

Classification of Lands, &c.

Crown lands are divided into three classes:—

- (1.) Town and village lands, the upset prices of which are, respectively, not less than £20 and £3 per acre; such lands are sold by auction, or leased for ten or thirty-three years at a rent of 5 per cent. on the value of the land:
- (2.) Suburban lands, the upset price of which may not be less than £2 an acre; these lands are also sold by auction, or leased as aforesaid:

- (3.) Rural lands, which may be disposed of at not less than £1 per acre for first-class, 10s. an acre for second-class, and 2s. 6d. an acre for third-class lands; such lands may be sold or leased by auction, or sold or leased on application.

No rural section may be larger than 666 acres in extent if first-class land, 2,000 acres if second-class land, or 5,000 acres if third-class land, whether offered by auction or application.

Applicants.

Every applicant must be at the age of seventeen years and upwards, and apply for Crown land solely for his own use and benefit, and not directly or indirectly for the use or benefit of any other person, whilst, including the land he applies for, he is not to be the owner, holder, or occupier under any tenure of more than one year's duration, either severally or jointly or in common with any other person or persons, of any land anywhere in New Zealand exceeding in the whole 5,000 acres of land computed as follows:—

- (a.) Every acre of first-class land is reckoned as $7\frac{1}{2}$ acres;
- (b.) Every acre of second-class land is reckoned as $2\frac{1}{2}$ acres;
- (c.) Every acre of third-class land is reckoned as 1 acre.

In cases where a ballot is required those applicants who are landless have preference over those who are not, and the decision of the Board as to which of the applicants are landless is final and conclusive. An applicant is deemed landless if he does not hold under any tenure such area of land, whether Crown land or not, as is in the opinion of the Board sufficient for the maintenance of himself and his family. In the case of a husband and wife (except when they are judicially separated), if either of them is not landless, neither of them shall be deemed to be landless.

The Board may also, with the approval of the Minister, on the opening of any land for public selection, set apart not more than one-third of such land as allotments in respect of which preference at any ballot shall be given to applicants who are landless, and who belong to any of the following classes:—

- (a.) Married men with children:
- (b.) Widowers with children:
- (c.) Widows with children:
- (d.) Married women with children and judicially separated from their husbands.

And all such applicants shall rank equally with each other.

The Board may, in addition, with the approval of the Minister, on the opening of any land for public selection, set apart certain allotments in respect of which preference at any ballot shall be given to applicants who are landless, and have within the previous two years competed at least twice unsuccessfully at any other land-ballot, whether under the Land Act, 1908, or under the Land for Settlements Act, 1908.

The decision of the Board as to the rejection or preference of any applicant shall be final and conclusive.

Before taking a ballot or otherwise disposing of applications for land the Board may, in such manner as it thinks fit, inquire into all matters affecting an applicant's suitability or his right of preference, and may reject any applicant who refuses or fails to answer any inquiries as to such matters to the satisfaction of the Board.

Every person who in future is successful in any land-ballot, and subsequently transfers or subleases his land, shall be disqualified for the period of five years after the date of such disposition from taking part in any other land-ballot.

Mode of acquiring Crown Lands.

Crown lands may be acquired as follows :—

- (1.) By auction, after survey, in which case one-fifth of the price is paid down at the time of sale, the balance within thirty days :—
- (2.) By application, after the lands have been notified as open for selection, in which case the applicant fills up a form (to be obtained at any of the Land Offices) and makes the declaration and undertaking required by the particular system he wishes to select under.
- (3.) Under special conditions, *e.g.*, the Land Board, with the Minister's consent, may sell small areas of Crown lands under 5 acres in extent to religious bodies, or to owners of dairy-factories, cheese-factories, or creameries, also as sites for fruit-preserving works, without the applicants having to go to public competition, but no land can be so sold at a less price than £1 per acre.

All applications, whether for surveyed or unsurveyed lands, are deemed to be simultaneous if made on the same day, and, if there be more than one applicant for the same land, the right of selection is determined by ballot.

Lands thrown open for application may be either surveyed or unsurveyed, and those not selected the first day remain open.

The Optional System of Selection.

Lands for selection are notified as open for application on and after a stated day, and, *at the option of the applicant*, may be obtained on any of the three following tenures: (a) Freehold; (b) occupation with the right of purchase; (c) renewable lease.

(a.) Freehold.

If the land is surveyed, one-fifth of the price is to be paid down when the application is granted, and the balance within thirty days; or, if the land is not completely surveyed, the survey fee is deposited when the application is agreed to, and goes towards the

purchase of the land; the balance must be paid within thirty days of notice that the survey is completed.

A certificate of occupation will issue to the purchaser on final payment, which will be exchanged for a Crown title so soon as the Board is satisfied that the following improvements have been completed, viz.—on first-class lands, up to £1 per acre; and on second-class lands, 10s. per acre. These improvements must be effected within seven years from the date of purchase.

(b.) *Occupation with Right of Purchase.*

Lands selected on this tenure are held under a license for twenty-five years. At any time subsequent to the first ten years, and before the expiration of the license, after having resided and made the improvements hereinafter described, the licensee can, on payment of the upset price of the land, acquire the freehold. If the land be not purchased, the license may be exchanged for a renewable lease.

The rent is 5 per cent. on the cash price of the land; if surveyed, a half-year's rent has to be paid at the time the application is approved, which represents the half-year's rent due in advance on the 1st day of January or July following the selection. If the land is unsurveyed, the cost of survey has to be paid, and is credited to the selector as so much rent paid in advance, counted from the 1st day of January or July following thirty days' notice of the completion of survey.

By the Land Act, 1908 (section 116), the Commissioner of Crown Lands and Receiver of Land Revenue may, in their discretion, grant to any Crown tenant who is not in arrears with his rent a rebate not exceeding one-tenth of the instalment of rent paid within one month after the day appointed for its payment. This provision reduces the amount of rent payable by a licensee under this tenure to $4\frac{1}{2}$ per cent. per annum, if paid promptly.

Residence and improvement of the land are compulsory, as hereinafter described.

(c.) *Renewable Lease.*

Lands selected on this tenure are leased for sixty-six years, with a perpetual right of renewal for further terms of sixty-six years, subject to revaluation at the end of each term, and to the conditions of residence and improvements described below. The rental is 4 per cent. on the cash price of the land, and applications are dealt with in the same way as under the previous tenure (b), but there is at no time a right to purchase the freehold.

Two or more persons may make a joint application to hold as tenants in common under either of the two last-named tenures.

The same concession as to rebate of rent for prompt payment applies as in the previous tenure—viz., a rebate up to 10 per cent.

A lessee may pay up to 90 per cent. of the capital value of his land at any time, when the rent shall be proportionately reduced. When he has paid up to 33 per cent. he is freed from all covenants

and conditions of his lease, except the covenant to pay rent and reside.

If in any land district the Land Board deems any Crown land (from its inferior soil or inaccessibility) not likely to be immediately productive, they may, with the consent of the Minister, open it on terms that will allow the tenants to occupy the land rent-free for a term not exceeding the first ten years of the sixty-six years' lease.

Residence and Improvements.

Under the two last-mentioned tenures, the conditions as to residence and improvements are:—

RESIDENCE—

- (1.) Must commence on bush or swamp lands within four years, and in open or partly open land within one year, from the date of selection :
- (2.) Must be continuous for six years on bush or swamp land, and for seven years on open or partly open land, on lands occupied with a right of purchase :
- (3.) Must be continuous for a term of ten years on renewable-lease lands.

The Board has power to dispense with residence in certain cases, such as where the selector is residing on adjacent lands, or is a youth or unmarried woman living with parents, and in a few other cases.

RESIDENCE implies the erection of a habitable house to be approved of by the Board.

The Governor has power to set apart certain areas of land which may be selected by persons who for a certain number of years may be represented by registered substitutes such as a near relation who shall reside upon it, in their place, and make the requisite improvements, subject to special regulations which the Governor shall lay down. It is especially enacted that these regulations shall not come into force until approved by both branches of the Legislature.

IMPROVEMENTS which must be made are as follows:—

The holdings must be improved to an amount equal to 10 per cent. of the value of the land within one year from the date of the license or lease; within two years must be improved to the amount of another 10 per cent. ; within six years must be improved to the value of another 10 per cent., making 30 per cent. in all within the six years. In addition to the above, the land must be further improved to the value of £1 for every acre of first-class lands, 10s. for every acre of second-class lands, and 2s. 6d. for every acre of third-class lands.

Improvements may consist of reclamation from swamps, clearing of bush, planting with trees or hedges, cultivation of gardens, fencing, draining, making roads, wells, water-tanks, water-races, sheep-dips, embankments or protective works, or in any way improving the character or fertility of the soil; or the erection of any building,

&c.; and *cultivation* includes the clearing of land for cropping, or clearing and ploughing for laying down with artificial grasses, &c.

Transfers and Dealings with Leases.

No lessee or licensee of Crown lands is entitled to transfer his interest therein, or to sublease his land, until he has resided continuously thereon for at least two years, and then only with the consent of the Minister and recommendation of the Land Board. But when by reason of special or unforeseen circumstance such disposition becomes, in the opinion of the Minister and Board, desirable, it may be permitted, although no such residence has taken place. This restriction does not apply to lessees of pastoral runs, nor to Crown tenants who selected land prior to the 20th November, 1907.

A Crown tenant may, however, mortgage his holding without the above consent (in the case of *ordinary* Crown lands), but must obtain consent during the first five years of his tenancy in the case of *settlement* lands.

Special conditions apply in the case of a Crown tenant mortgaging under the New Zealand State-guaranteed Advances Act, 1909 (*vide* section 50).

Every transferee or sublessee must make the same declaration as the original selector of the holding.

Lease-in-perpetuity.

This tenure was created by the Land Act, 1892, and repealed by the Land Laws Amendment Act, 1907. It provided for a lease of 999 years, with no right of renewal, and no power for the lessee to acquire the freehold of his holding, whilst the rental was fixed at 4 per cent. on the prairie value of the land. No new leases under this tenure can now be granted, but existing leases are unaffected, save by the following amendments:—

A lessee can pay off up to 90 per cent. of the capital value of his land in sums of £10 at a time. By this means a settler may gradually reduce the rent he has to pay by saving his earnings in the prosperous seasons, and thus be better able to meet the losses which bad seasons may entail. So soon as he has paid up 33 per cent. of the capital value he is freed from all other covenants of his lease except the payment of rent and residence. The Land for Settlements Fund will benefit by all these payments (to be used for the purchase of further estates). In order that the territorial revenue shall not suffer to any appreciable amount by the payments made to Capital Account, it is to be credited with 4 per cent. on the total accounts so paid off.

Any holder of a lease in perpetuity may exchange his present lease for a renewable lease, and the lessee has the choice of electing whether the new rental shall be based upon the original capital value at time of selection or the present-day value (excluding the value of the improvements, which belong to the selector).

Lessees-in-perpetuity may also purchase the fee-simple of the land comprised within the leases at present-day value, determined

by arbitration, but giving to the lessee the value of all his own improvements. Regulations under this section were published in the *Gazette* of 11th March, 1909.

Special-settlement Associations.

Under special regulations, to be made by the Governor, persons may form themselves into an association, and may select and apply for a block of land to be held and occupied under prescribed conditions. No one can hold more than 500 acres, and not more than 250,000 acres can be set aside in any one year.

The capital value of lands within a special settlement is fixed after survey by special valuation, but may not be less than 10s. an acre; the rental is not less than 4 per cent. on the capital value, and the tenure is a renewable lease.

Residence, occupation, and improvements are generally the same as already described, and applications have to be made in manner prescribed by regulations.

Exchange of Tenure.

The holders of mining district land-occupation leases for twenty-one years have the right of exchanging them for renewable sixty-six years' leases, and such an exchange will enable the lessees to apply for an increased area. The holders of pastoral lands in mining districts, under special regulations, have also the right, under certain conditions, to exchange their leases for renewable sixty-six years' leases with all their privileges.

Village Settlements.

Village settlements are disposed of under regulations made from time to time by the Governor, but the main features are as follow:—

Such settlements may be divided into:—

- (1.) Village allotments not exceeding 1 acre each, which are disposed of either by auction among the applicants or by application, as already described, with option of tenure, the cash price being not less than £3 per allotment:
- (2.) Homestead allotments not exceeding 100 acres each, which are available on renewable lease at a 4-per-cent. rental on a capital value of not less than 10s. per acre.

Residence, improvements, and applications are the same as already described for rural land. The leases are exempt from liability to be seized or sold for debt or bankruptcy.

The Minister of Finance is empowered in certain cases to advance small sums for the purpose of enabling selectors to profitably occupy their allotments.

Small Grazing-runs.

Small grazing-runs are divided into two classes: First class, not exceeding 5,000 acres; second class, not exceeding 20,000 acres in area. The rental in both cases is not less than 2½ per

cent. on the capital value per acre, but such capital value cannot be less than 10s. per acre. Small grazing-runs are leased for terms of twenty-one years, with right of renewal for other twenty-one years, at a rent of not less than $2\frac{1}{2}$ per cent. on the then value of the land. The runs are declared open for selection, and applications and declarations on the forms provided have to be filled in and left at the Land Office, together with the deposit of one half-year's rent, which represents that due on the 1st day of March or September following the selection.

No holder of a pastoral run, and no holder of freehold or leasehold land of any kind whatever, over 1,000 acres in area, exclusive of the small grazing-run applied for, may be a selector under this system; and only one small grazing-run can be held by any one person, except on the recommendation of the Land Board and with the approval of the Minister.

The lease entitles the holder to the grazing rights, and to the cultivation of any part of the run, and to the reservation of 150 acres round his homestead through which no road may be taken; but the runs are subject to the mining laws.

Residence is compulsory, if the run comprises bush or swamp land, within three years; if it is open land, within one year; and must be continuous to the end of the term, but may in a few cases be relaxed. Improvements necessary are as follow: Within the first year, to the amount of one year's rent; within the second year, to another year's rent; and within six years, to the value of two other years' rent: making in all a sum equal to four years' rental which must be expended within six years. In addition to these improvements, bush-covered first-class runs must be improved to an amount of 10s. an acre, and second-class bush-clad runs to an amount of 5s. an acre.

After three years' compliance with the conditions, a run may be divided amongst the members of the selector's family.

Pastoral Runs.

Pastoral country is let either by application or by auction for varying terms not exceeding twenty-one years; and, excepting in extraordinary circumstances, runs must not be of a greater extent than will carry twenty thousand sheep or four thousand head of cattle. Runs are classified from time to time by special Commissioners into: (1) Pastoral lands, which are suitable only for depasturing more than five thousand sheep; (2) pastoral-agricultural lands, suitable for subdivision into areas of under 5,000 acres, which may be either let as pastoral runs, generally for short terms, or cut up for settlement in some other form. Leases of pastoral lands may not be resumed; leases of pastoral-agricultural lands may be resumed at any time after twelve months' notice, without compensation.

Except on the recommendation of the Land Board, and with the approval of the Minister of Lands, no one can hold more than one

run; but, in case of any one holding a run of a carrying-capacity less than ten thousand sheep, he may take up additional country up to that limit.

Runs are offered at auction or by application from time to time, and half a year's rent has to be paid down at the time of sale, being the amount due in advance on the 1st day of March or September following the sale, and the purchaser has to make the declaration required by the Act. All leases begin on the 1st day of March, and they entitle the holder to the grazing rights, but not to the soil, timber, or minerals; and the lease terminates over any part of the run which may be leased for some other purpose, purchased, or reserved. The tenant has to prevent the burning of timber or bush, except when it is intended to grass the land; in open country to prevent the growth of gorse, broom, or sweetbriar; and to destroy the rabbits on his run. With the consent of the Land Board, the interest in a run may be transferred or mortgaged, but power of sale under a mortgage must be exercised within two years.

The Land Act, 1908 (section 237), provides that, with the consent of the Minister, the Land Board may permit the holder of any pasturage lease or license to do any one or more of the following things:—

- (a.) To cultivate any portion of his run for the purpose of growing winter feed for the stock depastured on the run;
- (b.) To plough and sow in grass any portion of his run not exceeding 3,000 acres;
- (c.) To clear by felling and burning bush or scrub any portion of his run, and sow the same in grass;
- (d.) To surface-sow in grass any portion of his run.

The holder of any such pasturage lease or license may, with the permission of the Land Board, bring such area of his run under crop as is sufficient for the use and maintenance of himself and family and his employees, subject to conditions to be prescribed by the Board as to cultivation thereof by means of a proper rotation of crops.

The powers so conferred on the lessee or licensee are exercisable only on the condition that he shall, on the termination of such lease or license, leave the whole of the area ploughed or cultivated properly laid down in good permanent grasses and clovers to the satisfaction of the Board.

In case it is determined again to lease any run on expiry of the lease, the new lease must be offered twelve months before the end of the term, and if, on leasing, it shall be purchased by some one other than the previous lessee, valuation for improvements, to be made by an appraiser, shall be paid by the incoming tenant, excepting in the case of a rabbit-proof fence, which is to be valued separately, together with the value of the improvements authorized as above. There is, however, power for Parliament to appropriate the value of improvements to be paid to the outgoing licensee, and

this value can be paid for by the incoming tenant either in one cash payment or by instalments, or the Governor may add the value of improvements to the capital value of the run (section 91 of the Reserves and Other Lands Disposal and Public Bodies' Empowering Act, 1910).

In the event of the then lessee or licensee not having become the purchaser, the Board shall, at least three months before the expiry of any such lease or license, proceed to have valued by arbitration all improvements consisting of necessary buildings, plantations, fences (other than rabbit-proof fences), and ditches for draining made on the lands the lease or license of which has been sold at auction as last aforesaid. Such valuation shall be based on the worth of the said improvements to the incoming tenant, or, in the case of a subdivision of the run, to the incoming tenants of the divided portions thereof.

The outgoing tenant may, however, where the run is not again offered for lease or license, remove fences, buildings, &c. Runs may also be divided with the approval of the Board.

Wood-pulp Industry.

In order to aid in the establishment of the wood-pulp industry for paper-making, the Governor was authorized to set apart land not suitable for close settlement or for leasing under the small-grazing-run system, of a total area not exceeding 50,000 acres, and this land may be disposed of by way of lease, in such areas and on such terms and conditions as have been fixed by special regulations; but no person shall be granted a lease over a greater area than 30,000 acres of such land, and no lease shall be for a longer term than twenty-one years or shall include any right of renewal. The full area of 50,000 acres was set apart by notice in the *New Zealand Gazette* of the 13th February, 1908.

The right to utilize the water-power of any stream on the land so disposed of, and the right to cut, fell, remove, or in any way utilize any timber growing thereon, are provided for in the regulations published in the *Gazette* of the 8th April, 1909.

Any land so set apart, if situated within the boundaries of a mining district under the Mining Act, 1908, shall remain subject to the provisions of that Act.

Flax Leases.

The Land Board may, with the approval of the Minister, lease by auction, for growing, cutting, or removing flax, any area not exceeding 2,000 acres, for a term not exceeding fourteen years, at such upset yearly rental as may be determined by the Board.

On the expiration of this lease a renewal may be granted to the former lessee, without auction, for a further term not exceeding fourteen years, at a rental to be determined by the Board not sooner than twelve months nor later than six months before the expiration of the first term.

These provisions apply both to land under the Land Act, 1908, and to land under the Land for Settlements Act, 1908.

Regulations giving full particulars of these leases were published in the *New Zealand Gazette* of the 1st April, 1909.

Settlement of Bush and Swamp Lands.

Section 127 of the Act provides liberal conditions for the selection and settlement of *bush and swamp* lands. Its provisions are: Land so opened is divided into three classes—(a) heavy-bush lands, (b) light-bush or swamp lands, and (c) scrub land, according to the nature of the vegetation existing on the lands opened for sale or lease. On heavy-bush lands the selector, after payment of his first half-year's rent, is exempt from further rent for a period of four years, whilst no rate can be levied or collected by any local authority on the land for the same period; on light-bush lands or swamp lands three years' exemption from rent and rates is allowed, whilst residence for the first five years may be dispensed with on swamp lands; on scrub lands two years' exemption from rent and rates is given.

As before mentioned, section 194 provides that land not likely to be immediately productive may be opened for selection on renewable lease, and no rent shall be payable thereunder for such period (not exceeding ten years) as the Land Board and Minister of Lands shall determine. This provision may be used instead of those embodied in section 127.

National Endowments.

Part VII of the Act provides for the setting apart of 7,000,000 acres of Crown land in New Zealand as a permanent endowment for the purposes of education and old-age pensions. In addition to this, it adds to such endowment any lands which, after the passing of the National Endowment Act, 1907, shall be taken up under renewable lease, or are now or shall be selected under lease as small grazing-runs under the provisions of Part V of the Land Act, 1908; but it enacts that so soon as the endowment shall reach a total area of 9,000,000 acres, no more Crown lands shall thereafter become national endowment by virtue of the Act. It also expressly provides that in regard to all the lands so set apart the fee-simple thereof shall not be parted with by way of cash sale, nor shall any such land be disposed of under occupation-with-right-of-purchase tenure.

A separate account (to be known as the National Endowment Account) is created, into which all revenue from the national endowment area shall be paid. From this revenue shall be deducted the cost of administration and all sums which have to be paid to any local or public authority under any existing Act. This enables the continuation of the payment of "thirds" and "fourths" to local bodies, and the payment of interest on loans raised under the Local Bodies' Loans Act, 1908.

Of the balance of the revenue 70 per cent. is to be applied for the purpose of education, and 30 per cent. for the purpose of old-age pensions. The moneys payable for educational purposes shall be applied, without any further appropriation than the Land Act, towards payment of all amounts which, by any Act now in force or hereafter to be passed, are chargeable on the Consolidated Fund for educational purposes, whether higher, secondary, or primary, and whether general or technical. If there is any residue after these payments are made, it shall be devoted towards payment of general authorities for education.

Out of the gross area of the national-endowment land sites may still be set apart for all necessary public purposes, whilst power is also taken in *section 267* to enable the Land Board to sell, with the Minister's consent, any portion of national-endowment land (not exceeding 5 acres in any one case) as a site for any building to be erected for any educational, religious, charitable, or public purpose, or for any other purpose which, in the opinion of the Land Board and the Minister, renders such a sale expedient in the public interest. The purchase-money of land so sold shall be paid into the National Endowment Account.

Section 268 provides for the raising of any sum not exceeding £50,000 in any one year (in addition to sums which might be borrowed under the Local Bodies' Loans Act, 1903) for the construction of roads and bridges through the national endowment lands, to render them suitable for settlement.

THE LAND FOR SETTLEMENTS ACTS.

In the earlier years of the settlement of New Zealand there were opportunities for men of capital and judgment to acquire large estates, and while there were plenty of good Crown lands to select from this was of great advantage when money was needed for administration and roads and bridges. These large estates employed hired labour, and most of them did little towards cultivating their lands, and consequently progress beyond the pastoral stage ceased in the districts in which they were situated. As the best lands in the course of years passed from the Crown, the country became a series of agricultural communities interspersed with large properties occupied by a manager and a few shepherds, and the people urged that they and their sons should be allowed to occupy these large estates instead of being compelled to go into inaccessible back country without roads or railways. To meet this the late Sir John McKenzie, then Minister of Lands, introduced into the Legislature in the session of 1892 a Bill intituled the Land for Settlements Act, which authorised the purchase from private individuals of suitable properties for subdivision into farms, which was extended and embodied in the Land for Settlements Consolidation Act, 1900.

Under the provisions of this Act and the amending Acts, which are now consolidated into the Act of 1908 and amending Act of 1909, properties have been acquired, and divided into small farms, and were originally leased in perpetuity at a 5-per-cent. rental, on a capital value fixed at a rate sufficient to cover first cost, together with survey, administration, and roads (if required). But by section 45 of the Act a renewable lease for thirty-three years is substituted and the rent reduced to $4\frac{1}{2}$ per cent. per annum, whilst each lease contains a perpetual right of renewal for further successive terms of thirty-three years on a rent to be determined by revaluation.

Lessees may pay off portions of the capital value of their land in sums of £10 up to 90 per cent. of the total capital value, whilst so soon as the lessee has paid up to 33 per cent. of the capital value he is freed from all other covenants of his lease except those providing for payment of rent and residence.

Lessees in-perpetuity under the former Acts have the right of exchanging their leases for renewable leases under the present Act, the new rental being $4\frac{1}{2}$ per cent. upon the original capital value at the time of selection or the present-day value (excluding the value of improvements.)

The usual process of acquisition is as follows: Whenever a property is offered to the Government, if it is so situated as to meet the object of the Act, a report on it is obtained from a Government officer, and, should his report be favourable, the question of purchase is then considered by a Board of Land Purchase Commissioners, composed of the Inspector (who is the permanent Chairman), three other Government officers (at present the Under-Secretary of Lands, the Surveyor-General, and the local Commissioner of Crown Lands), whose training and duties qualify them to advise the Government as to whether the purchase is a suitable one, and as to the price which should be given for the property, and a member nominated by the Government from residents in the district where the land to be dealt with is situated. It is only on the advice of this Board that the Government acts. In nearly all cases the properties acquired have been improved to a certain extent by fencing and buildings, and were situated in the neighbourhood of closely settled districts. The amount which may be expended per annum under the Act is £500,000. The Act also provides for the exchange of high-lying pastoral Crown lands for low-lying agricultural lands suitable for small holdings.

Lands may also be taken compulsorily in cases where the Board cannot agree with the owner as to price, &c., and where the Governor in Council decides to acquire the land for closer settlement. The amount payable to the owner is fixed by section 31 of the Land for Settlements Act, 1908, as follows: The *unimproved* value is that given in the valuation roll upon which the owner has been paying rates, plus 10 per cent. of the total value up to £50,000, and 5 per cent. on all amounts above that sum. The

improvements are to be specially assessed under the Valuation of Land Act, 1908, as at the time when the requisition for the taking of the land is gazetted. To the total amount so ascertained as above is added another 2 per cent. by way of compensation for the compulsory taking. The owner of any estate acquired in this manner has the option of obtaining a lease of 400 acres of first-class land, or 1,000 acres of mixed classes (first, second, and third), from the Government without competition, prior to the opening of the estate for public application.

The acquisition of lands under the Land for Settlements Acts has proved beneficial in providing homes for a large class of men of moderate capital who shrink from the rough work of breaking in new country, or who, having accumulated capital (cash, stock, and implements), prefer open country near civilization. Sons of farmers begin life near the old home, and help from there is given in many ways. The system also affords to the small-farmer class of the Old Country an opening for building up homes for themselves where their previous experience will be of use, instead of having to learn the methods adapted to a new and wild country.

Preference is given to landless and married people, and applicants who have been unsuccessful at former ballots, whilst all applicants have to satisfy the Land Board as to their means to stock and cultivate the property applied for and erect suitable buildings thereon. The Board, in fact, has a discretion as to who may become tenants.

When land acquired under this Act contains a homestead in the *bona fide* occupation of a tenant, the occupant may be granted, without competition, a lease of such homestead and land around it, but not exceeding 400 acres in area.

Portions of purchased estates not suitable for close settlement may be opened as pastoral areas, while, to enable such pastoral areas to be properly worked, detached areas of low-lying lands may be added to the pastoral areas although they may not be contiguous.

Land may be taken under the Act for workmen's homes and home farms within any borough having a population of not less than 1,000 persons, or within a radius of twenty miles from the border thereof. Such land may be set apart under the Workers' Dwellings Act, 1908, or leased to workers on the renewable-lease system in allotments not exceeding $\frac{1}{2}$ acre for an urban, 5 acres for a suburban, and 10 acres for a rural allotment.

Regulations giving full directions to applicants under the Land for Settlements Act, 1908, were issued in the *Gazette* of 23rd March, 1909, and should be in the hands of every one before applying for lands thereunder.

Details of the operations under the Land for Settlements Acts will be found in Part II of this work.

During the second session of 1909 a new departure was authorized by the passing of the Land Settlement Finance Act, 1909.

LAND SETTLEMENT FINANCE.

The intention of this system is to promote closer settlement of land by enabling groups of purchasers to buy private freehold property for subdivision among them, and to raise the purchase-money by means of a loan guaranteed by the Government. For this purpose any five or more persons may by agreement form an incorporated land settlement association, and may purchase in the name of that association any estate consisting of not less than 250 acres. The agreement of purchase must comprise a scheme for the subdivision of the estate into allotments not less than 25 acres and not more than 200 acres in extent, irrespective of value, or up to 500 acres, provided the unimproved value of such larger allotment does not exceed £2,500. The agreement becomes operative only if it is confirmed by Order in Council in pursuance of a recommendation of the Board of Land Purchase Commissioners. On the confirmation of the agreement the incorporated association, acting through the Public Trustee as its agent, is empowered to raise the total purchase-money of the estate by the issue of debentures under the guarantee of the Government. On the completion of the purchase the estate is transferred to the association, and the several allotments are then transferred by the association to the individual purchasers. Each purchaser gives a mortgage to the association to secure the purchase-money of his allotment, together with interest at such rate as is sufficient to meet the interest on the debentures and the incidental expenses of the association. The purchase-money of each allotment so secured by mortgage is payable by such instalments as the mortgagor chooses, not less than a specified amount in each year, and the balance must be paid in twenty years. All capital and interest moneys so paid to the association by the purchasers are expended in meeting the interest accruing due on the debentures, and the balance is accumulated in the hands of the Public Trustee as a sinking fund for the redemption of the debentures.

Each member of an association, in addition to paying the purchase-money of his allotment, will also have to pay a sum equal to one-half of 1 per cent. of the purchase-money of his allotment for the purpose of providing a fund out of which the expenses of managing an association can be paid, and possible future losses through default may be met.

It is not lawful for any person to acquire an interest in land acquired under this Act since the 3rd December, 1910, if the unimproved value of such land, together with the unimproved value of all other land held by him in New Zealand, exceeds the sum of £2,500.

Special commissioners may be appointed, their duties being to assist in the formation of associations by helping to secure suitable land, and to afford information to intending settlers.

The title to any allotment is subject to the following restrictive provisions:—

(1.) Every purchaser must possess the qualifications required by applicants for Crown land under Part III of the Land Act, 1908.

(2.) Until at least one-third of the purchase-money has been paid off, a purchaser must reside on his allotment, and has no power to alienate or charge it.

(3.) Transfers of any allotment are subject to the provisions of Part XIII of the Land Act, 1908, in the same manner as in the case of land now alienated in fee-simple by the Crown.

EDUCATIONAL ENDOWMENTS.

Crown lands may from time to time be gazetted and reserved as education reserves, and subsequently set aside as endowments for educational purposes. They are then subject to the Education Reserves Act, 1908, and were formerly disposed of by the School Commissioners for each district under the provisions of that Act, or under Part XI of the Land Act, 1908, by the Land Board of the district. By the provisions of the Education Reserves Amendment Act, 1910, the School Commissioners were abolished, and all educational endowments vested in the Crown for education purposes. They are now administered solely by the Land Board in a similar manner to Crown lands, but subject to the special provisions of the Education Reserves Acts. They may be leased either on renewable lease for thirty-three years, or under the Public Bodies' Leases Act, 1908, under eight different kinds of tenancy, or under the Land Act. The revenue derived from the endowments is, after deducting the expenses of administration, paid over to the Education Board of the district in the case of primary education reserves, or to the governing bodies of secondary schools in the district in the case of secondary education reserves.

In addition, a portion of the revenue derived from national endowments, as already stated, is devoted to the purposes of education.

PURCHASE OF NATIVE LANDS BY GOVERNMENT.

From about the year 1823 (which is the date of the first recorded deed) until the 6th February, 1840, the date of the Treaty of Waitangi, lands in New Zealand were acquired by direct purchase from the Maoris by individual members of the white races. During the years 1837 to 1839, or about the time it became probable that the sovereignty of the islands would be assumed by the United Kingdom, the greater number of these purchases were made, and they extended to most parts of the country. These purchases are technically known as "the old land claims," and their total number (including pre-emptive claims), as estimated by Commissioner F. Dillon Bell in 1862, was 1,376, covering an area of about 10,322,453 acres, out of which large area grants were recommended for 292,475 acres. These figures have been slightly added to since, but not to any very large extent. The large area shown above was reduced on survey to about 474,000 acres, situated principally to the north of Auckland.

The difference in area between the amount granted to the purchasers and the total area surveyed became what are termed "surplus lands of the Crown." It was held that the Native title had been fully extinguished through such purchases over the whole area surveyed; but, as by Ordinance No. 2 of 9th June, 1841, the claimants could not be granted more than 2,560 acres each, the balance became vested in the Crown on the assumption of the sovereignty, the Native title having been fully extinguished.

In many cases the titles did not issue to those to whom the land was awarded, as they were compensated by scrip issued by the Government, with the understanding that such scrip was to be exercised in the purchase of Crown lands in the neighbourhood of Auckland, to which place it was desirable—so soon as the capital was founded—to draw a population. The lands thus paid for in scrip became Crown lands, and these, together with the surplus lands, have from time to time been disposed of by the Crown and settled on. The amount of scrip, &c., issued up to 1862 was over £109,000.

On the signing of the Treaty of Waitangi on the 6th February, 1840, the pre-emptive right was ceded to the Government, and consequently private purchase ceased. This remained the law until the passing of the Native Land Act, 1862, when the Crown relinquished its right of pre-emption, whilst at the same time the purchase of Native lands for the Crown did not abate, but continued side by side with the private purchases up to the passing of the Native Land Court Act, 1894.

The Maori Lands Administration Act, 1900, was a measure intended to restrain Natives from pauperizing themselves in the future by parting with the freehold of the balance of their lands (about five millions of acres). Its main provisions were—

- (1.) Prohibition of further alienation of the freehold of Native lands, either to the Crown or private purchasers, except as to inchoate transactions at the date of the passing of the Act and certain, limited areas which were then comprised in separate titles and held by not more than two owners.
- (2.) Leasing of Native lands through partly elected and partly nominated Councils possessing all the powers and, where authorized, exercising all or any of the functions of the Native Land Court.
- (3.) Advances to Natives to road and otherwise improve their surplus lands for their own use and occupation.

The Maori Land Settlement Act, 1905, amended the above. Whilst placing the power of dealing with their lands in the hands of the Maori owners, through special Boards called "Maori Land Boards," it restores to the Crown the right of purchasing Maori lands in certain districts, provided that the price to be paid was no less than that fixed by the Valuer-General as its value.

All dealings with Native land are now determined by the provisions of the Native Land Act, 1909, which consolidated and repealed most of the numerous previous Acts, and came into force on the 31st March, 1910.

From time to time since 1840 various sums were appropriated by Government or by Parliament for the acquisition of a Crown estate. Up to the date of passing of the Native Land Act, 1862, these operations were conducted by officers of the Government specially appointed, who, from a knowledge of the Maoris, their customs and disposition, were successful in securing large areas of land for settlement. It must be conceded that their operations as a whole were successful, and that the number of disputed cases arising out of their labours was exceedingly small. The Waitara purchase is, however, here excluded, for there were reasons of general policy affecting that sale which did not prevail in other cases. This purchase was the ostensible cause of the Native rebellion of 1860 and following years, but the motives which led to it were far deeper than the mere purchase of a few acres—there was a great principle at stake.

The difference effected in the mode of purchase by the Native Land Act, 1862, was this: Previously, the title of the Maoris who were to receive payment for the land was decided by the Land Purchase officers; but the Act quoted set up a Court, presided over by able Judges, who determined the titles, which were afterwards registered in a special Court. Purchases have since been effected with the registered owners.

It is difficult to obtain figures showing the actual area acquired by the Crown from the Maoris up to 1870, but in round numbers it was 6,000,000 acres in the North Island; whilst the whole of the South Island, with the exception of reserves for the original Native owners, was acquired prior to the passing of the Native Land Act, 1862. Stewart Island was purchased from the Native owners by deed dated 29th June, 1864.

The Native rebellion of 1860–69 brought Native-land purchases, for the time being, practically to a standstill.

The Immigration and Public Works Acts of 1870 and 1873 appropriated £200,000 and £500,000 respectively for the purchase of lands in the North Island; and these amounts have, up to the 31st of March, 1910, been augmented by further annual appropriations from the public funds and other loan-moneys, covering altogether a total expenditure since 1870 of £2,072,322, with the following results: Area finally acquired in the North Island from Natives, from 1870 to 31st March, 1910, 8,004,851 acres.

The purchase of Native lands by the Crown was continued under the provisions of the Maori Land Settlement Act, 1905, but is now carried out by the Native Land Purchase Board under the provisions of Part XIX of the Native Land Act, 1909.

LAND TRANSFER AND DEEDS REGISTRATION.

[By G. G. BRIDGES, Registrar-General of Land.]

PRIOR to 1870 conveyancing in New Zealand was based upon the English laws of real property as existing at the date of the constitution of the colony, varied in some important particulars by the Conveyancing Ordinance of 1842, and other colonial legislation, now embodied in the Property Law Consolidation Act, 1903. Considerable areas of land in all parts of the Dominion are still held and dealt with under this system.

DEEDS REGISTRATION.

Provision has existed since 1841 for the registration of deeds and instruments affecting real property, and is now contained in the Deeds Registration Act, 1903. Registration is not compulsory, and is not essential to the validity of the instrument, although it is highly important as a record and to secure priority. The title is based upon the documentary evidence and not upon the registration.

THE LAND TRANSFER ACT.

By the Land Transfer Act, 1870, re-enacted with amendments in 1885, and now embodied in the Land Transfer Act, 1908, the system was introduced of title by registration. Although this principle had long been in vogue in parts of central Europe, it was unknown in the British Dominions until its introduction into the Australasian Colonies in 1856 by Sir Robert Torrens, after whom it is popularly known as the Torrens system. It was first introduced by him into South Australia, and was afterwards adopted by the other colonies.

Districts and Officers.

For the purposes of administration the Dominion is divided into eleven districts, corresponding generally with the land districts and the old provinces. The Act is administered in each district by a District Land Registrar, who in most districts combines the duties with those of Examiner of Titles and of Registrar of Deeds, the Registrar at Wellington being also Registrar-General of Land for the Dominion.

Land subject to Act.

The land subject to the Land Transfer Act comprises all land alienated from the Crown since 1870, all land included in any order under the Native Land Acts vesting such land in any person in freehold tenure, and all land vested in any person in fee-simple by virtue of any Act of the General Assembly, besides land which has been brought under the Act on the application of the proprietors after investigation and acceptance of the title by the Department.

Certificate of Title.

Every registered proprietor of a freehold estate in possession in land under the Act is entitled to a certificate of title for the same. Duplicates of all certificates of title are retained in the office and bound up to form the register-book. The certificate of title may be described as the backbone of the whole system. Upon it are entered memorials of all registered dealings affecting the particular land, and it is received as conclusive evidence of the title of any person named as proprietor of any estate or interest.

Method of Dealing.

Forms of transfer, mortgage, lease, &c., are prescribed by the Act. When any dealing is effected the appropriate form is filled up and signed by the necessary parties and stamped, and is then presented at the Registry Office with the certificate of title for registration. No interest passes on the execution of the instrument, but only on registration. The instrument itself is retained in the office, a memorial of it being noted on the certificate, which is then handed to the transferee or other person entitled. Mortgages and leases are executed in duplicate, one copy being retained in the office and the other handed back, endorsed as registered, to the mortgagee or lessee.

Implied Covenants.

All usual covenants are implied in the various instruments by the Act, and provision is also made for the introduction of special covenants by the use of abbreviated forms, so that a dealing which under the old system would have necessitated a lengthy deed may be effected under the Act by a very short one.

Mortgages.

One of the most notable differences between the new system and the old is the form of a mortgage. Under the old system the mortgagor conveyed the land to the mortgagee subject to a right to a reconveyance or "equity of redemption" on repayment of the money. Under the Act no transfer of the property takes place, but a charge only is created, the mortgagee being specially empowered to sell the land in the event of default being made in payment. A simple receipt by the mortgagee for the amount secured releases the land from the encumbrance. Provision is made, similar to that contained in the Property Law Consolidation Act, for sale through the Registrar of the Supreme Court in the event of the mortgagee desiring to buy in the mortgaged land.

Transmission.

Persons becoming entitled to any estate by transmission, such as administrators or trustees, may be registered as proprietors on application in writing made to the Registrar.

Trusts.

It is a cardinal principle of the land-transfer system that no notice of trusts may be entered on the Register, and no instrument declaring any trust may be registered.

Caveat.

Any person claiming to be beneficially interested in any land by virtue of any trust or under any unregistered instrument may enter a caveat, and so long as such caveat remains in force no entry can be made on the Register affecting the estate or interest protected by such caveat. In the event of a dealing being presented for registration, notice is sent to the caveator, who is allowed fourteen days within which to take steps to enforce his rights. Failing action being taken within that time the caveat lapses.

Execution of Instruments.

Every instrument for registration under the Act is required to be signed by the registered proprietor and attested by at least one witness, whose occupation and address must be added. For the protection of the parties as well as of the Department the attesting witness is required to be a solicitor, licensed land-broker, Justice of the Peace, Postmaster, or other official or well-known person. Instruments executed in other parts of the British Dominions may be verified in accordance with the Imperial Statutory Declarations Act, 1835, or any local enactment respecting the verification of instruments for use abroad; if executed in any foreign country, by declaration made according to the law of such country and certified by the British Consul; or if there be no such law the instrument must be attested by the British Consul, who shall certify that no provision is made by the laws of such country. Every instrument must also have indorsed upon it a certificate that it is correct for the purposes of the Act, signed by the party claiming under it or by a solicitor or licensed land-broker employed by him.

Assurance Fund.

Any person sustaining loss or damage through any omission or mistake of the Department may bring an action against the Registrar-General for recovery of damages. Certain classes of cases are excepted, such as loss occasioned by breach of trust, or by the improper use of the seal of any corporation, or the improper exercise of any power of sale or re-entry, and action can only be brought within six years after right of action accrued. To meet claims an Assurance Fund is maintained by a payment of a halfpenny in the pound on the value of all land when first brought under the Act.

Surveys.

In order to insure accuracy in the certificate of title a declared survey plan by a licensed surveyor is usually required when bringing

land under the Act on application and also on subsequent subdivisions. The examination of survey plans, preparation of diagrams, &c., is performed by the Land Transfer Survey Branch, which is drawn from the Survey Department for this special work. All survey plans are approved by the Chief Surveyor of the district before being accepted for deposit.

Licensed Land-brokers.

The Act provides that the Registrar-General, with the sanction of the Governor, may license fit and proper persons to be land-brokers for transacting business under the Act. A bond is required from them in the sum of £1,000, with two sureties in the sum of £500 each, and a license fee of £5 is paid annually.

Appeal.

If the District Land Registrar refuses to perform any act which he is required to perform, or if any person is dissatisfied with his decision in any matter, the person deeming himself aggrieved may summon him to appear before the Supreme Court to substantiate the grounds of his refusal or decision. An appeal may also be made in the first instance to the Registrar-General whose decision will be binding upon the District Land Registrar, but will be subject to appeal to the Supreme Court in like manner as the decision of a District Land Registrar.

Fees

The fees payable to District Land Registrars under the Land Transfer Act as fixed by Order in Council of 27th January, 1909, and the scale of fees prescribed by the Deeds Registration Act, are appended.

A table is also added, compiled from the Annual Return of the Department, showing the amount of business transacted under the principal headings during the year ended 31st March, 1911.

FEES PAYABLE TO DISTRICT LAND REGISTRARS UNDER THE LAND TRANSFER ACT, 1908.

For bringing land under the provisions of this Act (over and above the £ s. d. cost of advertisement),—

When the title consists of a Crown grant and none of the land included therein has been dealt with	0	2	0
When the title is of any other description and the value exceeds £300	1	0	0
When the title is of any other description and the value exceeds £200 and does not exceed £300	0	15	0
When the title is of any other description and the value exceeds £100 and does not exceed £200	0	10	0
When the title is of any other description and when the value does not exceed £100	0	5	0
Contribution to Assurance Fund, upon first bringing land under this Act, in the pound sterling	0	0	0½

Other fees,—		£	s.	d.
For every application to bring land under the Act	..	0	5	0
For every certificate of title on transfer where the consideration does not exceed £100	..	0	10	0
For every other certificate of title	..	1	0	0
Registering memorandum of transfer, mortgage, encumbrance, or lease	..	0	10	0
Registering transfer, or discharge of mortgage or of encumbrance, or the transfer or surrender of a lease	..	0	5	0
Registering proprietor of any estate or interest derived by settlement or transmission	..	0	10	0
For every power of attorney deposited	..	0	10	0
For every registration abstract	..	1	0	0
For cancelling registration abstract	..	0	5	0
For every revocation order	..	0	10	0
Noting caveat	..	0	10	0
Cancelling or withdrawal of caveat, and for every notice relating to any caveat	..	0	5	0
For every search	..	0	2	0
For every general search	..	0	5	0
For every map or plan deposited	..	0	5	0
For every instrument declaratory of trusts, and for every will or other instrument deposited	..	0	10	0
For registering recovery by proceeding in law or equity, or re-entry by lessor	..	0	10	0
For registering vesting of lease in mortgagee consequent on refusal of trustee in bankruptcy to accept the same	..	0	10	0
For entering notice of marriage or death	..	0	10	0
For entering notice of writ or order of Supreme Court	..	0	10	0
Taking affidavit or statutory declaration	..	0	5	0
For the exhibition of any deposited instrument, or for exhibiting deeds surrendered by applicant proprietor	..	0	5	0
For certified copy not exceeding five folios	..	0	5	0
For every folio or part folio after first five	..	0	0	6
For every notice to produce deeds or instruments	..	0	5	0
For every outstanding interest noted on certificate of title	..	0	5	0
When any instrument purports to deal with land included in more than one grant or certificate of title, for each registration memorial after the first	..	0	2	0

REGULATIONS.

All fees under the Act shall be due and payable in advance.

Where several properties are included in one form of application, there shall be charged in respect of each property an application fee and a fee for bringing the land under the Act. Land included within one outer boundary shall be deemed one property for the purpose of this regulation.

In all cases a fee of £1 is hereby prescribed as the charge to be made for advertising notice of application: Provided that whenever it is necessary that unusual publicity shall be given to any application the District Land Registrar may require payment of such additional sum as shall, in his judgment, be sufficient to defray the cost of such advertisements.

In all cases where application is made to bring land under the Act, and the certificate of title is directed to issue and is issued in the name of the applicant, the fees for bringing such land under the Act, with the exception of the application fee, may, at the request of the applicant, remain unpaid until such land is dealt with by him as registered proprietor. The District Land Registrar shall retain any such certificate of title until the fees due upon the same have been paid, and, until such payment, shall not register any dealing with the land included in such certificate of title.

Printed forms for use under the Act are supplied by the Stamp Department at a charge of 1s. each. Solicitors, land-brokers, and others having forms printed for their own use and at their own expense, shall, on approval of such forms by the Registrar, be entitled to have the same sealed free of charge.

DEEDS REGISTRATION ACT, 1908 (SECOND SCHEDULE).

<i>Scale of Fees.</i>		£	s.	d.
For the registration of any instrument	.. .. .	0	10	0
For the recording and comparing thereof, for every folio of seventy-two words	.. .. .	0	0	6
For every section or part of section, allotment or part of allotment contained in any map or plan delineated on or annexed to any instrument presented for registration (exclusive of sections or allotments unaffected by the instrument but necessarily delineated to show the boundaries of the land dealt with by the instrument)	.. .. .	0	1	0
For every copy of or extract from any recorded or deposited instrument or memorial, for every folio of seventy-two words therein	.. .. .	0	0	6
For every section or allotment, or part of a section or allotment, delineated thereon	.. .. .	0	1	0
For every copy of or extract from the general index, for every line	.. .. .	0	0	6
For every search or inspection of indexes or recorded or deposited instrument, for each individual property, section, or allotment in respect of which search or inspection is made	.. .. .	0	1	0
For every certificate under seal verifying a copy of or extract from any recorded or deposited instrument, in addition to the fee per folio for copying	.. .. .	0	5	0
On the deposit of any instrument for safe custody	.. .. .	0	10	0
For every attendance to produce any instrument under section 48 of this Act, for each day or part of a day's attendance	.. .. .	1	1	0
For the registration of any map or plan accompanied by a statutory declaration	.. .. .	0	10	0
For recording, per folio of seventy-two words	.. .. .	0	0	6
For every section or part of a section delineated	.. .. .	0	1	0
For recording any instrument in the Maori language, and for any copy of the recorded copy thereof, per folio of seventy-two words	.. .. .	0	1	0
For recording the translation of any instrument in the Maori language, per folio of seventy-two words	.. .. .	0	0	6

EXTRACT FROM ANNUAL STATEMENT OF BUSINESS TRANSACTED UNDER THE LAND TRANSFER ACT DURING THE YEAR ENDED 31st MARCH, 1911.

	Number.	Area in Acres.		Value or Consideration.
		Town and Suburban.	Country.	
Applications to bring land under Act..	705	323	73,053	£ 1,229,990
Transfers registered	22,157	7,394	1,958,709	14,285,758
Mortgages registered	23,397	6,068	4,485,401	16,896,484
Leases registered	2,988	..	..	..
Certificates of title issued	10,364	..	..	..

Amount remaining secured by mortgage: £83,536,631. Total fees received, £52,301.

Details of business under the Deeds Registration Act are not available.

The total number of instruments registered during the year was 18,743, and fees received £18,025.

NATIVE LAND ACT, 1909.

[By Judge T. W. FISHER, Under-Secretary, Native Affairs.]

THE Native lands of the Dominion are administered under the Native Land Act, 1909, and several other Acts which relate principally to reserves and trust lands, together with rules and regulations made thereunder.

The main feature of the present law is the widening of the avenue and facilitating the alienation and settlement of Native lands. Formerly the disposal of Native lands was more or less restricted, and in some cases absolutely prohibited. The Act of 1909 removes all restrictions and prohibitions on the alienation of land by a Native or on the alienation of Native land, with certain exceptions.

Under the Act the alienation of Native land may be effected in four different ways:—

1. Private alienation by the owners themselves.
2. Alienation by a Maori Land Board as the statutory trustee or agent of the owners.
3. Alienation by a committee of management by the incorporated owners.
4. Alienation in pursuance of a resolution of a majority of the owners assembled in a meeting called for that purpose by a Board.

The first of these methods is prohibited in cases where the land is owned by more than ten owners in common, unless the Board of the district thinks fit, in special cases, to permit such alienations. All private alienation requires confirmation by the Maori Land Board in the North Island, or by the Native Land Court in the South Island. Confirmation must be refused if the Native alienating would be left without sufficient land for his support. In the case of leases special provisions are made for securing compensation to the tenant for his improvements. Mortgages are not permitted (except in favour of the Public Trustee or Government) unless approved by the Governor in Council.

The second method of alienation is effected by a Maori Land Board, either as a statutory trustee or as the agent of the Native owners. In respect of the former the land is vested in the Board, and is to be disposed of by public auction or tender by way of lease or sale in equal proportions. In respect of the latter, the land is not vested in the Board, but is administered by it as agent for the owners. It may be leased by the Board to Natives only, and is inalienable by the owners themselves.

The third mode of alienation is that effected by elective committees of management of the Native owners incorporated by order of the Native Land Court in substantial accordance with the existing practice.

The fourth mode of alienation is in pursuance of a resolution of the assembled owners. A Maori Land Board may summon a meeting of the owners of any Native land to consider proposals for its alienation. A resolution proposed at any such meeting is carried if the owners voting for it own a larger area of the land affected than those who vote against it. The resolution is then submitted to the Board for confirmation, and, if confirmed, will be carried into effect either by Order in Council, instrument of alienation executed by the Board on behalf of the owners, or by such other means as is appropriate to the nature of the resolution.

Any such meeting of assembled owners may in this manner do any of the following things :—

1. Vest the land in the Board for sale or lease.
2. Agree to incorporation by the Native Land Court.
3. Carry into effect any proposed alienation—*e.g.*, a sale or lease to a particular individual.
4. Sell the land to the Crown.

To prevent the aggregation of large areas of Native lands a purchaser or lessee of Native land must make a declaration that the land applied for, together with all other land already held by him, does not exceed 3,000 acres of third-class land calculated as follows: First-class land as $7\frac{1}{2}$ acres, and second-class land as $2\frac{1}{2}$ acres, of third-class land. The class to which any lands belong shall be determined in accordance with the Act.

The Crown has power to acquire Native lands under Part XIX, Native Land Act, 1909, through the Native Land Purchase Board, which consists of the Native Minister, Under-Secretary Crown Lands, Under-Secretary Native Department, and Valuer-General.

Any area, negotiations for which are in contemplation for purchase by the Crown may, under section 363 of the Native Land Act, 1909, be prohibited from private alienation for the period of one year (subject to a further extension of six months from date of *Gazette* notice).

All offers to the Crown should be addressed to the Native Land Purchase Board, Native Department, Wellington.

All surveys are undertaken by the Land and Survey Department, under authorities issued by the Judge of the Native Land Court or President of the Maori Land Board, and funds are provided (if necessary) as under :—

For the purpose of the purchase and settlement of Native land by the Crown, the Minister of Finance is empowered to raise loans not to exceed in all £500,000 in any one financial year, and if the full amount authorized is not raised within the year, the balance may be borrowed within the next year, in addition to the amount otherwise authorized for that year. The moneys so obtained may, under the Native Land Settlement Account, be applied to the following uses :—

- The purchase or acquisition of Native land.
- The survey of Native land.

The making of advances to Maori Land Boards for the construction of roads and bridges and otherwise opening up and preparing for settlement any Native lands under the control of the Boards, or for the purpose of discharging any mortgage or charge to which such land is subject. The advances to any one Board are limited to £50,000 in any one financial year, and are to be a charge on the land for the benefit of which the expenditure was incurred.

The revenue derived from the lands, together with interest and payments received, will be applied in the first place to the payment of interest and sinking fund on the advances, together with administrative and other necessary expenses; the balance to be paid to the Native owners, or invested for their benefit, as the Board decides.

Regulations as to procedure for alienations through the Maori Land Boards or Native Land Courts are notified on page 1717, *New Zealand Gazette* No. 50, 1910.

The work of the Native Land Court is divided into six Court circuits: North Auckland, South Auckland, Bay of Plenty, Gisborne, Wanganui, and Wellington (includes South and Chatham Islands).

The Native Land Court Registrars Districts are—

Auckland (comprising North and South Auckland and Bay of Plenty circuits),
 Gisborne (comprising Gisborne circuit),
 Wanganui (comprising Wanganui circuit),
 Wellington (comprising Wellington circuit).

The boundaries of the Court circuits are practically co-terminus with the Maori Land Board District boundaries.

Maori Land Boards now comprise six districts, and their boundaries are notified on page 1713, *New Zealand Gazette* No. 50, 1910.

The Head Offices of the respective Boards are as under:—

Tokerau District Maori Land Board ..	.. Auckland.
Waikato-Maniapoto District Maori Land Board ..	.. Auckland.
Wairariki District Maori Land Board ..	.. Rotorua.
Aotea District Maori Land Board ..	.. Wanganui.
Tairāwhiti District Maori Land Board ..	.. Gisborne.
Ikaroa District Maori Land Board ...	.. Wellington.

All communications should be addressed to the President.

As to alienation of the lands in the South Island, these are dealt with by the Native Land Court, and any communication in connection therewith should be made to the Registrar, Native Land Court, Wellington.

A Native owning Native land in severalty may upon application have his land declared European land by the Native Appellate Court if that body thinks fit.

No Native land can be willed to a European other than the wife or husband of the testator, or a European who would have been entitled had the deceased died intestate, or to a relative not more remote than the fourth degree.

The following enactments were passed during the session of 1910 :—

1. The Native Townships Act, 1910.
2. The Rating Amendment Act, 1910.
3. The Thermal Springs Districts Act, 1910.

The Native Townships Act makes better provision with respect to the ownership and disposition of land subject thereto. Under the Act land situated in a Native township may be sold to the Crown or to private persons. It is provided that the Maori Land Board administering a Native township shall be a leasing authority within the meaning of the Public Bodies' Leasing-powers Act, 1908, and may grant what are known as "Glasgow leases," *vide* section 4 of the last-named Act. The provisions of the Native Land Act, 1909, apply, with certain exceptions, to a Native township. This Act repeals seven statutes or parts of statutes.

The Rating Amendment Act provides, with certain modifications, that Native freehold land shall be liable to rating and subject to the provisions of the Rating Act, 1908, in the same manner as European land. Customary land (land, title to which has not been investigated and determined) is exempt from rating.

The Thermal Springs Districts Act repeals the Act (similar title) of 1908, and thereby releases from restriction some 300,000 acres of Native land. This large area of land may now be dealt with under the provisions of the Native Land Act, 1909, subject to certain restrictions with respect to lands having thermal or mineral waters thereon.

It may be worthy of note that the legislation, commencing with 1909, affecting Native lands is of a very progressive and forward nature, all tending towards the betterment of titles and disposition and settlement thereof.

The Native Land Act, 1909, repeals some seventy-one statutes or parts of statutes, but it does not affect the administration of the following classes of Native lands :—

1. Native reserves vested in the Public Trustee under the Native Reserves Act, 1882, the West Coast Settlements Reserves Act, 1892, or the Westland and Nelson Native Reserves Act, 1887.
2. Lands subject to the East Coast Trust Lands Act, 1892.
3. Lands vested in trustees for Natives under any Act.

STATE-GUARANTEED ADVANCES DEPARTMENT.

ADVANCES TO SETTLERS BRANCH.

THE Advances to Settlers Office was established by an Act passed in 1894. An administrative officer called the Superintendent was appointed early in the following year, and a Board set up to advise and co-operate with the Superintendent. Advances can only be granted with the consent of the Board.

The capital fund was limited to £3,000,000, which was to be raised within two years from the passing of the Act, at an annual rate of interest not higher than 4 per cent. The first issue of £1,500,000 realized £94 8s. 9d. per £100 stock. The minimum advance was fixed at £25, and the maximum at £2,500, repayable in thirty-six years and a half by half-yearly instalments of 3 per cent. on the amount borrowed.

The legislation has been amended at different times, and is now embodied in the State-guaranteed Advances Act, 1909. It authorizes the borrowing of moneys for the purpose of lending to settlers, workers, and local authorities. Each year there may be borrowed for advances to settlers £1,500,000, to workers £500,000, and to local authorities £1,000,000.

Money is advanced to settlers on first mortgage of lands and improvements held under the following classes of tenure, free from all encumbrances, liens, and interests other than leasehold interests, that is to say,—

- (a.) (1.) Freehold land in fee-simple under the Land Transfer Act, 1908. (2.) Freehold land in fee-simple the title to which is registered under the Deeds Registration Act, 1908.
- (b.) Crown land on perpetual lease under the Land Act, 1885.
- (c.) Crown land held under Part III or Part IV of the Land Act, 1892, or of the Land Act, 1908.
- (d.) Crown land held on lease as a small grazing-run under the Land Act, 1885, or under the Land Act, 1892, or the Land Act, 1908.
- (e.) Crown land held on agricultural lease under the Mining Act, 1891.
- (f.) Crown land held on lease (not being for mining purposes) under the Westland and Nelson Coalfields Administration Act, 1877.
- (g.) Native land held on lease under the West Coast Settlement Reserves Act, 1881, or under the West Coast Settlement Reserves Act, 1892.
- (h.) Land held on lease under the Westland and Nelson Native Reserves Act, 1887.
- (i.) Land held under the Thermal Springs Districts Act, 1881, or the Thermal Springs Districts Act, 1908.
- (j.) Educational and other reserves held under leases administered by the Land Boards.
- (k.) Crown land held by license on the deferred-payment system under Part III of the Land Act, 1885.
- (l.) Land held under lease from a leasing authority as defined by the Public Bodies' Leasing-powers Act, 1908, or the Public Bodies' Leases Act, 1908, and providing for the payment by the incoming tenant of valuation for improvements made upon the land.

- (m.) Land held under lease from a Maori Land Board under the Maori Land Settlement Act, 1905.
- (n.) Crown lands held on lease for agricultural purposes under the Mining Districts Land Occupation Act, 1894.
- (o.) Crown lands held on license-for-residence sites under the Mining Act, 1891, or the Mining Act, 1905.
- (p.) Crown land held on lease under section 45, Part III, of the Mining Act, 1898, and section 45, Part III, of the Mining Act, 1908.
- (q.) Maori lands which have been transferred in trust for leasing to and are held under leases from a Maori Land Board under the powers contained in the Maori Lands Administration Act, 1900, and its amendments.

If the land offered as the security for the desired advance is of any one of the classes of land lettered (b), (c), (d), (e), (f), (i), (j), (k), or (n), the applicant for a loan must, before despatching his application, post to the Commissioner of Crown Lands for the district in which the land is situated a notice of his application, in order that the Commissioner may at once furnish the Superintendent with a report respecting the leasehold. A copy of the form of notice can be obtained from any post-office.

NOTE.—Envelopes for posting applications to the Superintendent may be obtained at all post-offices in New Zealand, together with application forms.

Loans can be granted only on the instalment system fully described hereafter):—

- (a.) On all freeholds, up to three-fifths of the value of the security: Provided that in the case of first-class agricultural freeholds loans may be made up to two-thirds of the value.
- (b.) On leaseholds, up to three-fifths of the value of the lessee's interest in the lease and the improvements thereon.
- (c.) On securities classified by the Board as first class, loans shall be granted for a term of thirty-six and a half years.
- (d.) On securities classified by the Board as second class, loans shall be granted for a term of thirty years.
- (e.) On securities classified by the Board as third class, loans shall be granted for a term of twenty years.

A security for a loan to a settler may be considered first class when the value of the land or the applicant's interest therein, apart from improvements, is not less than three-fourths of the amount of the loan, and the property is in the opinion of the Board otherwise satisfactory; second class when the value of the land or the applicant's interest therein, apart from improvements, exceeds one-third but does not equal three-fourths of the amount of the loan, and the property is deemed by the Board otherwise satisfactory; and third class when the value of the land or the applicant's interest therein, apart from improvements, does not exceed one-third of the amount

of the loan, and the property is deemed by the Board otherwise satisfactory.

The classifying of securities, the granting of advances, and the determining of what shall be considered first-class agricultural land shall rest solely with the Board of the office.

Where an advance is required for the purpose of erecting a building or making other improvements, the amount of the loan granted by the Board may either be paid over in one sum when the building is completed or improvements effected, or, if the applicant desires it, may be advanced in progress payments from time to time as improvements are made or the erection of the building proceeds. An inspection and report must be made by an officer of the Valuation Department prior to payment of any progress-payment on account of the loan, and for each such inspection a fee as per scale below shall be paid by the applicant.

No loan of less than £25 or more than £3,000 can be granted. Applications for loans not exceeding £500 shall have priority over applications for larger sums. If the applicant has already obtained any advance under this Act and is desirous of obtaining a further advance, either on the same security or on a separate security, the amount of the application, added to the amount of the advances already obtained, must not exceed £3,000. The security which the applicant offers for the loan must consist of one or more holdings of the several classes of tenure before mentioned, and must, of course, be of the necessary value; and, if the security is leasehold, all the covenants and conditions of the lease, including the payment of rent, must have been regularly complied with.

All applications must be accompanied by a valuation fee according to the following scale:—

Advances to Settlers Scale of Valuation Fees.

On an application for a loan not exceeding	£	s.	d.
£100	0	10	6
Exceeding £100 but not exceeding £250 ...	1	1	0
Exceeding £250 but not exceeding £500 ...	1	11	6
Exceeding £500 but not exceeding £3,000	2	2	0

Mortgages are repayable by half-yearly payments of principal and interest combined. They may also be wholly repaid at any time. Interest is charged at the rate of 5 per cent., reducible to $4\frac{1}{2}$ per cent. provided payment is made not later than fourteen days after due date and no arrears in respect of instalments or other payments under the mortgage remain outstanding.

The following tables show, taking a loan of £100 as an instance, how much of each instalment is applied to repaying the principal and how much is in payment of interest. They show also the amount of rebate in respect of each instalment, and the balance of principal remaining due after payment of the respective instalments until the loan is entirely repaid:—

TABLE A.—TERM, THIRTY-SIX YEARS AND A HALF.

TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS OF £3 FOR EVERY £100 OF THE LOAN.

Half-year.	Half-yearly Instalment.	Apportioned thus :		½ per Cent Rebate of Interest.	Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.		
	£ s. d.	£ s. d.	£ s. d.	s. d.	£ s. d.
1	3 0 0	2 10 0	0 10 0	5 0	99 10 0
2	3 0 0	2 9 9	0 10 3	5 0	98 19 9
3	3 0 0	2 9 6	0 10 6	4 11	98 9 3
4	3 0 0	2 9 3	0 10 9	4 11	97 18 6
5	3 0 0	2 9 0	0 11 0	4 11	97 7 6
6	3 0 0	2 8 8	0 11 4	4 10	96 16 2
7	3 0 0	2 8 5	0 11 7	4 10	96 4 7
8	3 0 0	2 8 1	0 11 11	4 10	95 12 8
9	3 0 0	2 7 10	0 12 2	4 9	95 0 6
10	3 0 0	2 7 6	0 12 6	4 9	94 8 0
11	3 0 0	2 7 2	0 12 10	4 9	93 15 2
12	3 0 0	2 6 11	0 13 1	4 8	93 2 1
13	3 0 0	2 6 7	0 13 5	4 8	92 8 8
14	3 0 0	2 6 3	0 13 9	4 7	91 14 11
15	3 0 0	2 5 10	0 14 2	4 7	91 0 9
16	3 0 0	2 5 6	0 14 6	4 7	90 6 3
17	3 0 0	2 5 2	0 14 10	4 6	89 11 5
18	3 0 0	2 4 9	0 15 3	4 6	88 16 2
19	3 0 0	2 4 5	0 15 7	4 5	88 0 7
20	3 0 0	2 4 0	0 16 0	4 5	87 4 7
21	3 0 0	2 3 7	0 16 5	4 4	86 8 2
22	3 0 0	2 3 2	0 16 10	4 4	85 11 4
23	3 0 0	2 2 9	0 17 3	4 3	84 14 1
24	3 0 0	2 2 4	0 17 8	4 3	83 16 5
25	3 0 0	2 1 11	0 18 1	4 2	82 18 4
26	3 0 0	2 1 6	0 18 6	4 2	81 19 10
27	3 0 0	2 1 0	0 19 0	4 1	81 0 10
28	3 0 0	2 0 6	0 19 6	4 1	80 1 4
29	3 0 0	2 0 0	1 0 0	4 0	79 1 4
30	3 0 0	1 19 6	1 0 6	3 11	78 0 10
31	3 0 0	1 19 0	1 1 0	3 11	76 19 10
32	3 0 0	1 18 6	1 1 6	3 10	75 18 4
33	3 0 0	1 18 0	1 2 0	3 10	74 16 4
34	3 0 0	1 17 5	1 2 7	3 9	73 13 9
35	3 0 0	1 16 10	1 3 2	3 8	72 10 7
36	3 0 0	1 16 3	1 3 9	3 7	71 6 10
37	3 0 0	1 15 8	1 4 4	3 7	70 2 6
38	3 0 0	1 15 1	1 4 11	3 6	68 17 7
39	3 0 0	1 14 5	1 5 7	3 5	67 12 0
40	3 0 0	1 13 10	1 6 2	3 5	66 5 10
41	3 0 0	1 13 2	1 6 10	3 4	64 19 0
42	3 0 0	1 12 6	1 7 6	3 3	63 11 6
43	3 0 0	1 11 9	1 8 3	3 2	62 3 3
44	3 0 0	1 11 1	1 8 11	3 1	60 14 4
45	3 0 0	1 10 4	1 9 8	3 0	59 4 8
46	3 0 0	1 9 7	1 10 5	2 11	57 14 3
47	3 0 0	1 8 10	1 11 2	2 11	56 3 1
48	3 0 0	1 8 1	1 11 11	2 10	54 11 2

TABLE A—TERM, THIRTY-SIX YEARS AND A HALF—*continued*.TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS OF £3 FOR EVERY £100 OF THE LOAN—*continued*.

Half-year.	Half-yearly Instalment.	Apportioned thus:		½ per Cent. Rebate of Interest.	Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.		
	£ s. d.	£ s. d.	£ s. d.	s. d.	£ s. d.
49	3 0 0	1 7 3	1 12 9	2 9	52 18 5
50	3 0 0	1 6 6	1 13 6	2 8	51 4 11
51	3 0 0	1 5 8	1 14 4	2 7	49 10 7
52	3 0 0	1 4 9	1 15 3	2 6	47 15 4
53	3 0 0	1 3 11	1 16 1	2 5	45 19 3
54	3 0 0	1 3 0	1 17 0	2 4	44 2 3
55	3 0 0	1 2 1	1 17 11	2 2	42 4 4
56	3 0 0	1 1 1	1 18 11	2 1	40 5 5
57	3 0 0	1 0 2	1 19 10	2 0	38 5 7
58	3 0 0	0 19 2	2 0 10	1 11	36 4 9
59	3 0 0	0 18 1	2 1 11	1 10	34 2 10
60	3 0 0	0 17 1	2 2 11	1 8	31 19 11
61	3 0 0	0 16 0	2 4 0	1 7	29 15 11
62	3 0 0	0 14 11	2 5 1	1 6	27 10 10
63	3 0 0	0 13 9	2 6 3	1 4	25 4 7
64	3 0 0	0 12 7	2 7 5	1 3	22 17 2
65	3 0 0	0 11 5	2 8 7	1 2	20 8 7
66	3 0 0	0 10 3	2 9 9	1 0	17 18 10
67	3 0 0	0 9 0	2 11 0	0 11	15 7 10
68	3 0 0	0 7 8	2 12 4	0 9	12 15 6
69	3 0 0	0 6 5	2 13 7	0 8	10 1 11
70	3 0 0	0 5 1	2 14 11	0 6	7 7 0
71	3 0 0	0 3 8	2 16 4	0 4	4 10 8
72	3 0 0	0 2 4	2 17 8	0 3	1 13 0
73	1 13 10	0 0 10	1 13 0	0 1	..

TABLE B.—TERM, THIRTY YEARS.

TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS OF £3 4s. 8d. FOR EVERY £100 OF THE LOAN.

Half-year.	Half-yearly Instalment.	Apportioned thus:		½ per Cent Rebate of Interest.	Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.		
	£ s. d.	£ s. d.	£ s. d.	s. d.	£ s. d.
1	3 4 8	2 10 0	0 14 8	5 0	99 5 4
2	3 4 8	2 9 7	0 15 1	4 11	98 10 3
3	3 4 8	2 9 2	0 15 6	4 11	97 14 9
4	3 4 8	2 8 10	0 15 10	4 11	96 18 11
5	3 4 8	2 8 5	0 16 3	4 10	96 2 8
6	3 4 8	2 8 0	0 16 8	4 10	95 6 0
7	3 4 8	2 7 7	0 17 1	4 9	94 8 11
8	3 4 8	2 7 2	0 17 6	4 9	93 11 5
9	3 4 8	2 6 9	0 17 11	4 8	92 13 6
10	3 4 8	2 6 4	0 18 4	4 8	91 15 2
11	3 4 8	2 5 10	0 18 10	4 7	90 16 4

TABLE B.—TERM, THIRTY YEARS—*continued*.TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS OF £3 4s. 8d. FOR EVERY £100 OF THE LOAN—*continued*.

Half-year.	Half-yearly Instalment.	Apportioned thus:		$\frac{1}{2}$ per Cent. Rebate of Interest.	Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.		
	£ s. d.	£ s. d.	£ s. d.	s. d.	£ s. d.
12	3 4 8	2 5 4	0 19 4	4 6	89 17 0
13	3 4 8	2 4 11	0 19 9	4 6	88 17 3
14	3 4 8	2 4 5	1 0 3	4 5	87 17 0
15	3 4 8	2 3 11	1 0 9	4 5	86 16 3
16	3 4 8	2 3 4	1 1 4	4 4	85 14 11
17	3 4 8	2 2 10	1 1 10	4 3	84 13 1
18	3 4 8	2 2 3	1 2 5	4 3	83 10 8
19	3 4 8	2 1 9	1 2 11	4 2	82 7 9
20	3 4 8	2 1 2	1 3 6	4 1	81 4 3
21	3 4 8	2 0 7	1 4 1	4 1	80 0 2
22	3 4 8	2 0 0	1 4 8	4 0	78 15 6
23	3 4 8	1 19 4	1 5 4	3 11	77 10 2
24	3 4 8	1 18 9	1 5 11	3 10	76 4 3
25	3 4 8	1 18 1	1 6 7	3 10	74 17 8
26	3 4 8	1 17 5	1 7 3	3 9	73 10 5
27	3 4 8	1 16 9	1 7 11	3 8	72 2 6
28	3 4 8	1 16 0	1 8 8	3 7	70 13 10
29	3 4 8	1 15 4	1 9 4	3 6	69 4 6
30	3 4 8	1 14 7	1 10 1	3 5	67 14 5
31	3 4 8	1 13 10	1 10 10	3 5	66 3 7
32	3 4 8	1 13 1	1 11 7	3 4	64 12 0
33	3 4 8	1 12 3	1 12 5	3 3	62 19 7
34	3 4 8	1 11 5	1 13 3	3 2	61 6 4
35	3 4 8	1 10 7	1 14 1	3 1	59 12 3
36	3 4 8	1 9 9	1 14 11	3 0	57 17 4
37	3 4 8	1 8 11	1 15 9	2 11	56 1 7
38	3 4 8	1 8 0	1 16 8	2 10	54 4 11
39	3 4 8	1 7 1	1 17 7	2 8	52 7 4
40	3 4 8	1 6 2	1 18 6	2 7	50 8 10
41	3 4 8	1 5 2	1 19 6	2 6	48 9 4
42	3 4 8	1 4 2	2 0 6	2 5	46 8 10
43	3 4 8	1 3 2	2 1 6	2 4	44 7 4
44	3 4 8	1 2 2	2 2 6	2 3	42 4 10
45	3 4 8	1 1 1	2 3 7	2 1	40 1 3
46	3 4 8	1 0 0	2 4 8	2 0	37 16 7
47	3 4 8	0 18 10	2 5 10	1 11	35 10 9
48	3 4 8	0 17 9	2 6 11	1 9	33 3 10
49	3 4 8	0 16 7	2 8 1	1 8	30 15 9
50	3 4 8	0 15 4	2 9 4	1 6	28 6 5
51	3 4 8	0 14 1	2 10 7	1 5	25 15 10
52	3 4 8	0 12 10	2 11 10	1 3	23 4 0
53	3 4 8	0 11 7	2 13 1	1 2	20 10 11
54	3 4 8	0 10 3	2 14 5	1 0	17 16 6
55	3 4 8	0 8 10	2 15 10	0 11	15 0 8
56	3 4 8	0 7 6	2 17 2	0 9	12 3 6
57	3 4 8	0 6 0	2 18 8	0 7	9 4 10
58	3 4 8	0 4 7	3 0 1	0 5	6 4 9
59	3 4 8	0 3 1	3 1 7	0 4	3 3 2
60	3 4 8	0 1 6	3 3 2	0 2	..

TABLE C, TERM, TWENTY YEARS.

TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS OF £3 19s. 8d. FOR EVERY
£100 OF THE LOAN.

Half-year.	Half-yearly Instalment.	Apportioned thus:		½ per Cent Rebate of Interest.	Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.		
	£ s. d.	£ s. d.	£ s. d.	s. d.	£ s. d.
1	3 19 8	2 10 0	1 9 8	5 0	98 10 4
2	3 19 8	2 9 3	1 10 5	4 11	96 19 11
3	3 19 8	2 8 6	1 11 2	4 10	95 8 9
4	3 19 8	2 7 9	1 11 11	4 9	93 16 10
5	3 19 8	2 6 11	1 12 9	4 8	92 4 1
6	3 19 8	2 6 1	1 13 7	4 7	90 10 6
7	3 19 8	2 5 3	1 14 5	4 6	88 16 1
8	3 19 8	2 4 5	1 15 3	4 5	87 0 10
9	3 19 8	2 3 6	1 16 2	4 4	85 4 8
10	3 19 8	2 2 7	1 17 1	4 3	83 7 7
11	3 19 8	2 1 8	1 18 0	4 2	81 9 7
12	3 19 8	2 0 9	1 18 11	4 1	79 10 8
13	3 19 8	1 19 9	1 19 11	4 0	77 10 9
14	3 19 8	1 18 9	2 0 11	3 10	75 9 10
15	3 19 8	1 17 9	2 1 11	3 9	73 7 11
16	3 19 8	1 16 8	2 3 0	3 8	71 4 11
17	3 19 8	1 15 7	2 4 1	3 7	69 0 10
18	3 19 8	1 14 6	2 5 2	3 5	66 15 8
19	3 19 8	1 13 5	2 6 3	3 4	64 9 5
20	3 19 8	1 12 3	2 7 5	3 3	62 2 0
21	3 19 8	1 11 1	2 8 7	3 1	59 13 5
22	3 19 8	1 9 10	2 9 10	3 0	57 3 7
23	3 19 8	1 8 7	2 11 1	2 10	54 12 6
24	3 19 8	1 7 4	2 12 4	2 9	52 0 2
25	3 19 8	1 6 0	2 13 8	2 7	49 6 6
26	3 19 8	1 4 8	2 15 0	2 6	46 11 6
27	3 19 8	1 3 3	2 16 5	2 4	43 15 1
28	3 19 8	1 1 10	2 17 10	2 2	40 17 3
29	3 19 8	1 0 5	2 19 3	2 0	37 18 0
30	3 19 8	0 18 11	3 0 9	1 11	34 17 3
31	3 19 8	0 17 5	3 2 3	1 9	31 15 0
32	3 19 8	0 15 11	3 3 9	1 7	28 11 3
33	3 19 8	0 14 3	3 5 5	1 5	25 5 10
34	3 19 8	0 12 8	3 7 0	1 3	21 18 10
35	3 19 8	0 11 0	3 8 8	1 1	18 10 2
36	3 19 8	0 9 3	3 10 5	0 11	14 19 9
37	3 19 8	0 7 6	3 12 2	0 9	11 7 7
38	3 19 8	0 5 8	3 14 0	0 7	7 13 7
39	3 19 8	0 3 10	3 15 10	0 5	3 17 9
40	3 19 8	0 1 11	3 17 9	0 2	..

Thus for the twenty-years term the weekly payment on a loan of £450 (the maximum obtainable) amounts to only 12s. 11d., or less than $7\frac{1}{2}$ per cent. per annum, including repayment of principal. On the thirty-years term it amounts to about 10s. 4d. per week, or less than 6 per cent., including repayment of principal. On the

thirty-six-and-a-half-years term it amounts to about 9s. 6d. per week, or $5\frac{1}{2}$ per cent., including repayment of principal.

The mortgagor may pay to the Superintendent at any time the whole balance of principal owing with interest to date of payment, and obtain a discharge of the mortgage on payment of the fee prescribed for such discharge.

The mortgagor may also from time to time pay to the Superintendent, in addition to the half-yearly payments, sums of £5 or a multiple of £5, which, at the next instalment due date, may be applied in one of the following methods, according as he directs:—

(a.) In payment of the half-yearly instalments (consisting partly of interest and partly of principal) as they fall due, until the deposit is exhausted; or

(b.) In payment of as many future half-yearly instalments of principal (but not of interest) as it will cover, and, as far as such instalments are concerned, the corresponding interest will not be charged. On the next half-yearly date, however, the mortgagor will be required to continue his payments as before, the advance payment having the effect of reducing the period during which he would have to pay such instalments. For instance, a mortgagor has a loan of £100 for a term of $36\frac{1}{2}$ years. On the due date of his eight half-yearly instalment he pays, in addition to the amount due, a sum of £5. This is applied in payment of his ninth, tenth, eleventh, twelfth, thirteenth, fourteenth, and fifteenth instalments of principal 12s. 2d., 12s. 6d., 12s. 10d., 13s. 1d., 13s. 5d., 13s. 9d., 14s. 2d. (see table), making a total of £4 11s. 11d.; and the corresponding interest—£2 7s. 10d., £2 7s. 6d., £2 7s. 2d., £2 6s. 11d., £2 6s. 7d., £2 6s. 3d., £2 5s. 10d. (which has not begun to accrue)—is not charged. A balance of 8s. 1d. remains in his favour. Then, on the next due date he has to make the half-yearly payment as usual (less 8s. 1d.), but, instead of being the ninth, it counts as the sixteenth instalment, and by this means the whole loan is repaid three years and a half earlier (seven half-yearly payments) than it otherwise would be.

(c.) It may be applied as provided in the next paragraph.

Readjustment of Loans.

On the due date of any instalment, after at least one-tenth of the loan has been repaid by means of the half-yearly instalments or of moneys repaid in advance, or both, the mortgagor (provided he is not in arrear with any instalment or other payment due under the mortgage) may, with the consent of the Superintendent, readjust the loan by treating the balance of principal then unpaid as a fresh loan duly granted on that date for a fresh term. But no readjustment is allowed unless the balance of unpaid principal amounts to at least £100. Under this arrangement the mortgagor

will be relieved of paying interest on the original amount of the loan, and will pay only on the balance of principal owing.

Following is the scale of fees payable for preparation of mortgages:—

Mortgages under the Land Transfer Act, 1908.

Law-costs of perusing title, preparing and registering mortgage (to be deducted from the advance):—

	£	s.	d.
If advance be not exceeding £250 ...	0	7	6
Exceeding £250 but not exceeding £500 ...	0	10	0
Exceeding £500 but not exceeding £750 ...	0	15	0
Exceeding £750 but not exceeding £1,000 ...	1	1	0
Exceeding £1,000 but not exceeding £1,500 ...	1	6	0
Exceeding £1,500 but not exceeding £2,000 ...	1	11	6
Exceeding £2,000 but not exceeding £3,000 ...	1	17	6

With cash disbursements, which are the same in every case, namely:—

	£	s.	d.
Search fee (with an additional 2s. for every certificate of title after the first) ...	0	2	0
Registration (with an additional 2s. for every certificate of title after the first)...	0	10	0

Mortgages under the Deeds Registration Act, 1908.

Law-costs of perusing title, preparing and registering mortgage (to be deducted from the advance):—

	£	s.	d.
If advance be not exceeding £150 ...	0	18	0
Exceeding £150 but not exceeding £250 ...	1	0	6
Exceeding £250 but not exceeding £500 ...	1	5	0
Exceeding £500 but not exceeding £750 ...	1	13	0
Exceeding £750 but not exceeding £1,000 ...	2	3	0
Exceeding £1,000 but not exceeding £1,500 ...	2	13	0
Exceeding £1,500 but not exceeding £2,000 ...	3	13	0
Exceeding £2,000 but not exceeding £3,000 ...	4	13	0

With cash disbursements:—

	£	s.	d.
Fee chargeable by solicitor not residing in registration centre for employing agent to register mortgage ...	0	5	0
Fee for partial or total discharge of mortgage ...	0	5	0
Fee for execution of consent by the Superintendent of any document ...	0	5	0
Fee for production of title-deeds held by the Superintendent ...	0	5	0

Valuation reports on the securities offered are made on behalf of the Department by expert land-valuers permanently employed by the Government Valuation of Land Department; and these reports, together with the corresponding valuations appearing in the district valuation rolls, prepared in accordance with the provisions of the

Valuation of Land Act, 1908, and reports from the Commissioners of Crown Lands in the case of Crown leaseholds, are considered by the General Board. Board meetings are held weekly, or as occasion requires, and the Superintendent is bound by the resolutions of the Board. A resolution is taken with regard to every application placed before the General Board, so that on the Board rests the responsibility of granting loans or of refusing to grant them.

Some applicants offer securities which are obviously not eligible; and in that event the valuation fees paid are returned, the securities are not reported on, and the applications do not go before the Board.

By arrangements made with the Post Office, mortgagors are enabled to pay their instalments and interest to the credit of the Superintendent at any money-order office, and free of all costs for remitting the money to Wellington. This is an arrangement at once convenient and economical for the large number of persons scattered all over New Zealand who have financial dealings with the Advances Office. Loans may also be repaid in part or in full through the Post Office, and advances also are made through the Post Office. The total amount advanced to settlers since the establishment of the Department (including moneys repaid and again advanced) was, up to the 31st March, 1911, £10,547,970.

ADVANCES TO WORKERS BRANCH.

Workers desirous of erecting or acquiring dwellings for themselves and their families may obtain advances on first mortgage of lands and improvements held under any of the classes of tenure above enumerated, and which are free from all encumbrances, liens, and interests.

1. A worker is defined as a person of either sex engaged (whether as an employee or on his or her own account) in manual or clerical work, who is not in receipt of an income of more than £200 per annum, and is not the owner of any land other than that offered as security.

2. Not more than £450 may be granted to any one borrower; and an advance shall not be made exceeding three-fourths of the total value of the security in the case of freehold land, or three-fourths of the value of the lessee's interest in the case of leasehold land. In no case shall an advance be granted which exceeds the value of the dwellinghouse, or be made to any applicants who do not take up their permanent residence on the security. A valuation fee of 7s. 6d. must accompany each application.

3. The amount of the loan granted by the Board may either be paid over in one sum, or, when the dwelling is to be erected, may be advanced in progress payments as the erection of the building proceeds. An inspection and report must be made by an officer of the Valuation Department prior to any progress payment being

made on account of the loan, and for each such inspection a fee of 7s. 6d. shall be paid by the applicant. Every applicant after lodging an application for a loan should await the decision of the Board before proceeding with the erection of the building.

4. On securities classified by the Board as first class, loans shall be granted for a term of thirty-six and a half years; on securities classified by the Board as second class, loans shall be granted for a term of thirty years; on securities classified by the Board as third class, loans shall be granted for a term of twenty years. A security for a loan to a worker may be considered first class when the value of the land or the applicant's interest therein, apart from improvements, equals or exceeds the amount of the loan, and the property is deemed by the Board otherwise satisfactory; second class when the value of the land or the applicant's interest therein, apart from improvements, exceeds one-half but does not equal the amount of the loan, and the property is deemed by the Board otherwise satisfactory; and third class when the value of the land or the applicant's interest therein, apart from improvements, does not exceed one-half of the amount of the loan, and the property is deemed by the Board otherwise satisfactory.

5. Loans are granted only on the instalment system, and may be repaid or readjusted as in the case of a loan from the Advances to Settlers Branch. Interest is charged at the rate of 5 per cent., reducible to $4\frac{1}{2}$ per cent. provided payment is made not later than fourteen days after due date, and no arrears or other payment under the mortgage remain outstanding.

6. Mortgages (under the Land Transfer Act, 1908) are prepared and completed free of charge to mortgagors, except the payment of cash disbursements, which shall be deducted from the advance.

No procuration fee, commission, or charge for obtaining a loan should be paid to any person.

Any person desiring an advance should make a written application on the form provided for the purpose, a copy of which can be obtained from any Postmaster in the Dominion. The Postmaster will also supply an envelope in which the application may be forwarded, and will give the applicant any explanation which may be required respecting the filling-in of the form. Application for a loan may also be made to representatives of the Valuation of Land Department, who, together with Postmasters, only, act as agents for the office throughout the Dominion. No professional assistance is necessary, and no charge is authorized for the filling-in of the application form. The Department has no agents authorized to act on its behalf in this respect.

The total of the advances to workers up to 31st March, 1911 (including moneys repaid and again advanced), was £1,277,765. The Department supplies applicants with plans and specifications free of charge. Eighteen different types of homes, containing from two rooms to eight rooms, are covered by the plans. They are

drawn with a view to getting the maximum of room and convenience for a reasonable price. The cost of the buildings varies according to the size from £120 to £640. The plans may be inspected at the Chief Post-offices in the Dominion, and at the Valuation Offices at Invercargill, Dunedin, Christchurch, and Auckland.

ADVANCES TO LOCAL AUTHORITIES BRANCH.

Loans are granted to Municipal Corporations, County Councils, Road Boards, or any other local body empowered to strike rates for the security of loans. There is no limit to the amount which may be advanced to any local authority. The loans must be granted at the same rate of interest as that at which the money is borrowed. Thus, if money is borrowed at $3\frac{1}{2}$ per cent. it must be lent to the local body at $3\frac{1}{2}$ per cent. The only charge made is 10s. per cent. commission. If a local body borrows £1,000 the only charge is one of £5. For this the Department has to do all the work of raising the money, keeping accounts, paying for printing, stationery, &c. Loans are repayable, principal and interest, in thirty-six years and a half. Power is given to lend for a term up to fifty years, but loans for a longer term than thirty-six years and a half are not favoured by the Board. The procedure for obtaining loans has been greatly simplified. Full instructions how to proceed are given in a pamphlet issued by the Department. After the poll by the ratepayers is taken the Department does all that is necessary. The loans may be obtained by instalments (not exceeding five) as the work proceeds, and so payment of interest on unused moneys avoided, as interest is charged by the Department only on moneys paid out. Up to the present all moneys required by the Board have been raised at $3\frac{1}{2}$ per cent., so that the local authorities who have borrowed from it have done so at an extremely low rate of interest. The half-yearly instalments of principal and interest on £100 amount to £2 8s. 9d. for a term of thirty-six years and a half. Tables are issued as in the case of advances to settlers and workers, so that the borrowing authority can ascertain the exact amount owing at any time.

The total of the loans either provisionally approved or finally granted to local bodies up to 31st March, 1911, was £1,857,394.

THE LAND- AND INCOME-TAX ASSESSMENT.

GENERAL.

IN New Zealand there is a combined land and income tax in force. The income-tax is, generally speaking, assessable on all income, with the exceptions of the rents or profits derived from the direct use or cultivation of land, and interest from mortgages of land. Land is subject to ordinary land-tax on its unimproved value, and to graduated land-tax when its unimproved value is £5,000 or more. Mortgages are subject to land-tax on their capital value. The exemption from income-tax of income derived from land is therefore necessary in order to avoid duplicate taxation, on the principle that where the capital is taxed (as in land and mortgages) the income earned by such capital is exempt.

Process of Assessment.

All persons, firms, and companies deriving income in or from the Dominion are required to furnish full returns. The forms on which returns are required to be made are posted direct to taxpayers, and they may also be obtained at any money-order post-office.

Returns of income have to be made annually, and must be posted to reach the Commissioner's office in Wellington not later than the 1st June; they should contain particulars of all income liable to taxation actually earned during the year ending on the 31st March immediately preceding.

Returns of land and mortgages are made annually, and must be posted to reach the Commissioner's office in Wellington not later than the 1st May. The returns should contain particulars of all land and mortgages as owned at noon on the 31st March immediately preceding. The Commissioner must also be notified from time to time of sales or purchases of land and alterations in mortgages.

Income-tax accounts are posted about the 1st January; they are made payable about the 31st January, and a period of fourteen days' grace is allowed in which to make payment, after which 10 per cent. is added to the amount of the tax.

Land-tax accounts are posted about the 1st November; they are made payable about the 30th November, and, as in the case of income-tax, fourteen days are allowed in which to make payment, after which 10 per cent. is added to the amount of the tax.

INCOME-TAX.

The following incomes are exempted: The income of—

The Crown;

The salary and emoluments of the Governor;

Local authorities;

- Friendly societies in respect of business carried on within their circle of membership only ;
- Building societies ;
- Public charitable and public educational institutions ;
- Savings-banks ;
- Commissioners of General Government and local body sinking funds ;
- Religious societies, so far as the funds are devoted to the support of aged or infirm ministers or their families only ;
- Imperial pensioners, so far only as the amount of the pension is drawn from the Crown and charged with income-tax in Great Britain or some British possession ;
- Any co-operative dairy factory company, so far as income is derived from dairy-produce supplied by its own shareholders ;
- Public societies not carrying on business for pecuniary gain ;
- The owner of land in respect of the rent thereof, or the profits derived from the direct use or cultivation thereof ;
- A mortgagee of land.

The returns are revised and checked in the Commissioner's Office, all doubtful points are queried, erroneous deductions disallowed, and additions made where necessary. In addition to these checks, the inspecting officers of the Department from time to time verify returns at the taxpayer's place of business. The Act provides special powers for examining all the books, &c., of a taxpayer. The Commissioner can at any time call for the production to the inspecting officers of all books, balance-sheets, and other evidence of the taxpayer's income ; penalties are provided in the event of refusal to comply with the Commissioner's request.

All officers of the Department are sworn to secrecy under severe penalties.

All persons, firms, companies, local authorities, Government Departments, and others furnish annual returns of the salaries, bonuses, &c., paid to their employees as remuneration for their services. These are compared with the individual returns of the employees.

All persons, firms, or companies paying interest on deposits, loans, &c., can be called on to furnish returns of such payments for the purposes of checking the returns of the recipients.

Penalties are provided for failure to make returns or for making incorrect or fraudulent returns.

Ordinary trading and manufacturing companies are assessed on the whole of the income derived, save that from exempted sources. In addition to the return required they have also to furnish a true copy of their last balance-sheet as issued to shareholders.

Banking companies are assessed on an arbitrary amount, arrived at by taking 15s. per cent. on the average assets and liabilities as shown by the quarterly statements published in the *Government Gazette*.

This mode of assessment was instituted owing to the difficulty in arriving at an accurate assessment of the income of banks in New Zealand.

Loan, building, and investment companies are charged on the whole of their income, inclusive of the interest on money lent on mortgage, but are not charged land-tax on mortgages.

Fire, accident, and guarantee insurance companies are assessed only on the business done in New Zealand, and reinsurances with companies or underwriters outside New Zealand are not allowed as deductions from income.

Life-insurance companies are assessed only on the income from investments (other than investments in land or mortgages of land on which they pay land-tax).

Mining companies are assessed on one-half of the dividends paid annually to shareholders. The other half is exempted, as being considered a return of the shareholders' capital.

Income from shipping.—Taxpayers are only assessed on that income derived from business originating in the Dominion, whether carried on outside New Zealand or not, but not on income from business originating outside New Zealand.

Persons, land syndicates, or companies dealing in land are assessable on the gains or profits from such dealing, but not on such income as rents or interest on unpaid purchase-money. A similar principle applies to dealing in shares.

Where a company has borrowed money on debentures secured on land, the debentures are deemed to be a mortgage up to the capital value of the land, and are assessed as a mortgage. If the amount of the debentures exceeds the capital value of the land, the income from this excess is liable for income-tax. The company is assessed as agent for the debenture-holders, and authorized to deduct the sum paid from the interest payable on the debentures.

The only income which is assessed at the source is that derived from public companies, either as dividends or interest on debentures. In all other cases income is assessed direct to the taxpayer, who has to make a return of income from all assessable sources (such returns do not, of course, include income from dividends of public companies or interest from mortgages and debentures).

What is deductible from Income.

Briefly put, the only deductions permissible are the losses, outgoings, and expenses actually incurred in the production of the income. No provisions or reserves against losses are allowed. The rules as to these are to be found in (more particularly) section 87 of the Land and Income Assessment Act, 1908.

It may be pointed out in this connection that in taxpayers' balance-sheets many sums are written off to Profit and Loss which are not allowed in a return of income.

An allowance is made for depreciation on plant, machinery, implements, &c., over and above the expenditure on repairs and renewals. This applies only in cases where there is depreciation which cannot be made good by repairs and renewals. The rate for this allowance has to be fixed by the Commissioner.

Obsolete machinery is also allowed for when the machinery has been actually discarded, and the loss definitely ascertained; the amount to be allowed is the actual loss on the machinery discarded, less any depreciation already allowed. Machinery superseded by something better but kept in reserve is not allowed for.

Taxpayers who occupy their own business premises are entitled to deduct a sum at the rate of 5 per cent. on the capital value of their interest therein. Mortgage-interest is not deductible.

All assessments are made in the office of the Commissioner. When assessments are completed, he serves each taxpayer with a notice of the amount on which he is assessed, and the amount payable thereon. The taxpayer then has the right to object to the assessment within a time specified, but the payment of the tax is not held over pending settlement of the objection. These objections are in the first instance dealt with by a Stipendiary Magistrate, with the right of appeal to the higher Courts on points of law.

Under the Amendment Act of 1907 an important alteration was made in the taxation of timber, flax, and minerals, which were previously liable to land-tax. The whole of the income derived from these sources is now assessable for income-tax, the value of such property being exempt from the payment of land-tax. It is found difficult to arrive at a fair valuation of such property for land-tax purposes, especially of minerals which are underground; but less difficulty is experienced in arriving at the annual income derived, and the new system is fairer alike to the taxpayer and to the Crown.

Special Exemption for Income-tax.

Each taxpayer, whether alone or in partnership, is allowed exemption up to £300. Life-insurance premiums on the taxpayer's own life are also allowed up to £50.

The £300 exemption is not allowed to absentees, nor to companies.

Principle of Graduation for Income-tax.

All incomes are exempt up to £300, with the exceptions previously mentioned. A person with a net income of £300 pays nothing, while one with an income of £350 pays tax on £50 only, and so on. Up to £700 the rate is 6d. in the pound, and it rises gradually to 1s. 2d. in the pound on incomes exceeding £2,300. The rates are shown in detail on page 774.

THE LAND-TAX.

The land-tax is assessed on the unimproved value of land—i.e., the capital value less the value of all improvements—so that there is an entire exemption of improvements on land from taxation.

Mortgages are deductible by the mortgagor for ordinary land-tax, and the mortgagee is charged with the amount so deducted.

The term "mortgage" includes any unpaid balance of purchase-money of land sold or under an agreement for sale.

An owner of land the value of which, apart from improvements, together with mortgages owing to him, does not exceed £1,500 (after deducting mortgages owing by him) is allowed an exemption of £500, but where such value exceeds £1,500 the exemption diminishes by £1 for every £2 that such value increases, so that no exemption is allowable when £2,500 is reached.

Owing to the deductions and exemptions allowable the number of land-tax payers is only 33,516, as compared with the number of land-owners—150,000 (approximately) freeholders and 27,496 Crown tenants.

The valuations for land-tax are made by the Government Valuation of Land Department, which employs a permanent staff of expert valuers, and supplies the assessment rolls used by the Land and Income Tax Department.

The Act contains a provision that in cases where the income from any land or mortgages, plus income from all other sources, is less than £200 per annum, and the owner is incapacitated by age or infirmity from supplementing such income, a further exemption may be allowed by the Commissioner upon his being satisfied that the payment of the tax would entail hardship on such owner. This discretionary power has been exercised in a considerable number of instances, especially in the case of widows and orphans with small means, and much hardship prevented.

All mortgages are assessed at their full nominal value, except where it is satisfactorily shown that owing to depreciation of the security or other cause such value has been diminished. In the case of mixed mortgages—that is, mortgages which are secured on both real and personal property—the amount of the mortgage chargeable with land-tax is taken to be the value of the land included in the security, the interest derived from the balance of mortgage being liable to income-tax.

Maori lands which are occupied by Europeans are subject to the ordinary land-tax, it being considered that, as such lands have benefited to some extent by the expenditure of public money, they should bear a proportion of the taxation. But, recognizing that in some instances, where the interests of the Native owners are small, the collection of the tax might possibly entail some hardship, the Legislature decided that only half the usual rate should be collected on such lands. Graduated tax is not chargeable on Native land.

*General Exemptions from Land-tax. **

All land* owned .

- By the Crown ;
- By local authorities ;
- By friendly societies ;
- By building societies ;
- By public, charitable, or public educational institutions not carried on for pecuniary profit ;
- By savings-banks ;
- By Commissioners of Public Sinking Funds ;
- By religious societies so far as the proceeds are devoted to the support of aged or infirm clergy or their widows or children.

All Maori land not leased to or occupied by any person other than the Native owners.

The value of timber, minerals, and flax (the owners are now charged for income-tax on these).

The sites of :—

- A place of worship for any religious society, or a place of residence for any of the clergy or ministers of such society ;
- A charitable or educational institution (other than a public charitable or educational institution hereinbefore exempt) not carried on exclusively for pecuniary profit : provided that this exemption shall not extend to more than 15 acres in the case of any one such institution ;
- A public library, athenæum, mechanics' institute, public museum, school of mines, or masonic lodge ;
- A showground or place of meeting of any agricultural society ;
- A public cemetery or public burial-ground ;
- A public garden, public domain, public recreation-ground, or other public reserve ;
- A public road or public street ;
- A public railway, to the extent of the land actually used for permanent-way, and for yards, sheds, and buildings for the purposes of traffic only, but not further nor otherwise.

The mortgages of banking companies, and loan building and investment companies whose head offices are in New Zealand. In the latter case the interest from mortgages is included in the income assessed for income-tax as explained previously.

* The term "land" under the Act includes mortgages of land.

GRADUATED LAND-TAX.

Rates of Graduated Land-tax.

Where the Total Unimproved Value of all the Land of any Tax-payer is not less than	And is less than	The Rate of Graduated Land-tax on such Total Unimproved Value is
£	£	
5,000	7,000	One-sixteenth of a penny in the pound sterling.
7,000	9,000	Two-sixteenths of a penny in the pound sterling.
9,000	11,000	Three-sixteenths of a penny in the pound sterling.
11,000	13,000	Four-sixteenths of a penny in the pound sterling.
13,000	15,000	Five-sixteenths of a penny in the pound sterling.
15,000	17,500	Six-sixteenths of a penny in the pound sterling.
17,500	20,000	Seven-sixteenths of a penny in the pound sterling.
20,000	22,500	Eight-sixteenths of a penny in the pound sterling.
22,500	25,000	Nine-sixteenths of a penny in the pound sterling.
25,000	27,500	Ten-sixteenths of a penny in the pound sterling.
27,500	30,000	Eleven-sixteenths of a penny in the pound sterling.
30,000	35,000	Twelve-sixteenths of a penny in the pound sterling.
35,000	40,000	Thirteen-sixteenths of a penny in the pound sterling.

At the value of £40,000 the rate is 8s. per cent., and for every additional £1,000 of unimproved value the rate is increased by one-fifth of a shilling. The rate reaches its maximum at £200,000, all estates of that value and over paying at the rate of £2 per cent. on the total unimproved value.

For and after the year ended the 31st March, 1910, the new progressive graduated scale over £40,000 was increased by 25 per cent. in the case of all land other than "business premises," which term is defined as being "any piece of land included within the area of a building used for business purposes, together with such additional land as immediately adjoins the said building, and is used and occupied in connection therewith, and does not exceed in extent the area of the building itself." A building is deemed to be used for business purposes "if it is exclusively or principally used, whether by the owner or by any occupier or occupiers, for the purposes of any business, trade, or industry."

The graduated land-tax is increased by 50 per cent. in the case of absentees, and it is made clear that the absentee tax does not apply to companies. A person is deemed to be an absentee "unless he has been personally present in New Zealand for at least one-half of the period of four years immediately preceding the year in and for which he is assessed for graduated land-tax: Provided that no person who has acquired land in New Zealand within the said period of four years shall be deemed to be an absentee if he has been personally present in New Zealand for at least one-half of the period which has elapsed between the time when he first acquired any land and the

commencement of the year in and for which he is assessed for graduated land-tax."

If an absentee taxpayer is liable to be assessed for graduated land-tax jointly with another taxpayer who is not an absentee, they shall be assessed and liable jointly as if neither was an absentee, and the absentee taxpayer shall also be separately assessed and liable for absentee land-tax on his share of the property.

There are a number of clauses for preventing the evasion of the graduated land-tax, which may be shortly summarized as follows:—

1. Life tenants are liable as if owners of fee-simple.

2. Lessees are liable as well as the owners (except lessees of Crown, Native, or exempt land, and where lease has been in existence for more than five years prior to the passing of the Act of 1907). The lessee, however, is entitled to rebate in certain cases to the extent of the tax paid by the owner of the land leased.

3. Shareholders are liable as if owners of the company's land in proportion to their interest in the paid-up capital, and are entitled to rebate in certain cases to the extent of the tax paid by the companies in respect of the share of the land.

4. Two companies having practically the same shareholders are deemed one.

5. Joint owners are assessable jointly as if the whole land was owned by a single person, and, in addition, the joint owners are liable for their interests in the joint estate taken in conjunction with any lands owned by them in severalty. The individual assessment is, however, entitled to a credit of the amount of tax paid in the joint assessments, so that graduated tax is not paid twice on the same land.

6. Persons owning land in severalty but occupying it jointly are liable for graduated tax at the same rate as would be payable if they owned the lands jointly, in the proportions which the values of the lands, apart from improvements, so severally owned bear to one another; and if the said lands are occupied, worked, or managed by any one of such persons on behalf of all of them or on a joint account, or if they are worked or managed by any other person as trustee or otherwise on behalf of the owners, then joint occupancy shall have been established.

7. Buyer in possession is liable, although conveyance has not been executed.

8. Seller remains liable until 15 per cent. of the purchase-money is paid unless the Commissioner of Taxes is satisfied that the subdivision is *bona fide*. This does not apply except in cases of agreement for sale made five years before the passing of the Act of 1907, or made by a seller who does not own more than £40,000 land value.

9. No disposition in such cases is to be effective so long as possession is retained.

10. Equitable owners are liable as if legal owners.

11. A trustee is liable as if beneficially entitled, excepting that when he is the owner of different lands in trust for different beneficial owners the graduated tax shall be separately calculated and

assessed in respect of each trust, unless by reason of joint occupancy or for any other reason he is liable to be jointly assessed.

12. No deduction is allowable on account of mortgage-money or unpaid purchase-money for graduated tax.

Church properties are exempted from graduated land-tax.

Rates of Tax.

INCOME-TAX.

Persons and Firms.

Under £400 taxable balance (including exemptions, equals net income under £700)	0/6 in the pound.
£401 to £600 taxable balance (including exemptions, equals net income £701 to £900)	0/7 in the pound.
£601 to £700 taxable balance (including exemptions, equals net income £901 to £1,000)	0/8 in the pound.
£701 to £800 taxable balance (including exemptions, equals net income £1,001 to £1,100)	0/9 in the pound.
£801 to £900 taxable balance (including exemptions, equals net income £1,101 to £1,200)	0/10 in the pound.
£901 to £1,000 taxable balance (including exemptions, equals net income £1,201 to £1,300)	0/11 in the pound.
£1,000 to £1,250 taxable balance (including exemptions, equals net income £1,301 to £1,550)	1/0 in the pound.
£1,251 to £2,000 taxable balance (including exemptions, equals net income £1,551 to £2,300)	1/1 in the pound.
Over £2,000 taxable balance (including exemptions, equals net income over £2,300)	1/2 in the pound.

*Companies.**

Under £1,250 taxable balance	1/0 in the pound.
£1,251 to £2,000 taxable balance	1/1 in the pound.
Over £2,000 taxable balance	1/2 in the pound.

LAND-TAX.

Ordinary land-tax (on the unimproved value)	1d. in the pound.
Graduated land-tax (in addition to ordinary land-tax)	$\frac{1}{16}$ d. in the pound. to £2 per cent.
Mortgages (on the capital value)	$\frac{3}{4}$ d. in the pound.

Total Yield of Tax.

The income-tax for the year ended the 31st March, 1911, amounted to £407,235. In considering this result the many exempted sources of income already enumerated must be borne in mind. The land-tax yielded £628,723.

For purposes of the ordinary land-tax the net assessed taxable value of land and mortgages, after allowing all exemptions, was £112,940,958.

The number of income-tax payers was 11,303. The number of land-tax payers was 33,516.

* No exemption is allowed to companies.

Assessment for 1910-11.

INCOME-TAX.

Classification of Taxpayers.—Number of Persons, &c., who pay Income-tax.

Net Income				Number of Persons, &c.
Under £700	..	..	..	8,445
Between £700 and £800	..	..	..	538
“ £800 and £900	..	..	..	382
“ £900 and £1,000	..	..	..	283
“ £1,000 and £1,500	..	..	..	717
“ £1,500 and £2,000	..	..	..	287
“ £2,000 and £3,000	..	..	..	246
“ £3,000 and £4,000	..	..	..	105
“ £4,000 and £5,000	..	..	..	58
“ £5,000 and £7,000	..	..	..	76
“ £7,000 and £10,000	..	..	..	53
Over £10,000	..	..	..	108
Total	..	..	..	11,303

Showing Income assessed.

				Net Income. £
Salaried persons	..	..	..	1,629,492
Traders and manufacturers—				
Persons and firms	..	..	..	3,871,362
Companies	..	..	..	4,358,277
Professional men	..	..	..	918,926
Various	..	..	..	288,564
Total	..	..	..	£11,066,621

The net assessed income, after allowing for the exemption of £300, is £8,094,016.

The yields of tax and the number of taxpayers for the last fourteen years were as follows:—

	Land-tax Payers. Number.	Land-tax paid. £	Income-tax Payers. Number.	Income-tax paid. £
1897-98 ..	13,132	267,286	4,588	115,210
1898-99 ..	15,449	298,052	4,647	115,480
1899-1900 ..	15,892	293,627	5,088	128,721
1900-1 ..	16,888	294,583	5,656	173,808
1901-2 ..	18,468	312,835	6,556	179,397
1902-3 ..	18,869	296,062	7,589	200,683
1903-4 ..	20,865	334,990	8,258	221,368
1904-5 ..	23,895	352,854	8,934	253,952
1905-6 ..	24,246	385,755	8,993	261,815
1906-7 ..	27,659	447,342	9,540	277,866
1907-8 ..	28,991	537,846	10,420	304,905
1908-9 ..	30,855	604,900	10,839	321,044
1909-10 ..	33,162	642,270	11,175	316,835
1910-11 ..	33,516	628,723	11,303	407,235

SYSTEM OF COLLECTION.

The tax may be paid at any postal money-order office, or direct to the office of the Commissioner of Taxes, Wellington. The cost of the collection of the income-tax for 1910-11, including cost of assessment, was 1·75 per cent., and for land-tax, including the cost of valuation of land, 2·71 per cent. The cost of collection of both taxes was 2·33 per cent.

OLD-AGE PENSIONS.

On the 26th June, 1894, a Committee of ten members of the House of Representatives was appointed to examine into and report upon the question of making provision for old age. The report of this Committee was brought up on the 27th September, 1894, and ordered to be printed. No particular scheme was recommended, but a suggestion was made that the Government should appoint a Royal Commission to inquire into the question.

On the 8th July, 1896, a Bill providing for the payment of old-age pensions was introduced by the late Right Honourable R. J. Seddon into the House of Representatives, but lapsed in Committee on the 16th September.

Later in the same year, on the 14th October, a Registration of People's Claims Bill was introduced, the object being to ascertain the probable cost of establishing an Old-age Pension Fund. This Bill passed through all its stages in Parliament, and received the Governor's assent on the 17th October.

In 1897 an Old-age Pensions Bill was again introduced, and passed all its stages in the House of Representatives, but was thrown out at the second reading in the Legislative Council.

Still again, in 1898, an Old-age Pensions Bill was introduced, and this year succeeded in passing both Houses, receiving the Governor's assent on the 1st November, 1898. Under this Act the Registration of People's Claims Act of 1896 was repealed.

Amending Acts were passed in 1900, 1901, 1902, and 1905. Early in the session of 1908 a consolidating Act was passed, since which there have been further amending Acts in 1908, 1909, and 1910.

The original Act of 1898 provided for the payment out of the Consolidated Fund of a pension of £18 per annum, or 6s. 11d. per week, without contribution by the beneficiaries. This amount was, however, increased to £26 per annum (*i.e.*, 10s. a week or £2 3s. 4d. a month) by the Amendment Act of 1905, which came into operation on the 1st September of that year.

The Act is administered by a Commissioner located at Wellington, who is responsible to the Minister of Finance. For the purposes of administration New Zealand is divided into seventy-three districts, each in charge of a Registrar. In the chief centres of population

the duties are performed by officers specially appointed for the purpose, but otherwise they are undertaken by Clerks of Stipendiary Magistrates' Courts. All claims are investigated by Stipendiary Magistrates, who alone have the power to grant or refuse pensions.

The Act applies to all residents of New Zealand who fulfil the necessary conditions, except—

- (1.) Maoris who receive votes other than pensions out of the grant appropriated by the Civil List Act, 1908.
- (2.) Aliens.
- (3.) Naturalized subjects who have not been naturalized one year.
- (4.) Chinese or other Asiatics, whether naturalized or not, and whether British subjects by birth or not.

The qualifications of an applicant are briefly as follows :—

- (1.) He must have reached the age of sixty-five.
- (2.) He must have resided continuously in New Zealand for the past twenty-five years.

NOTE.—Continuous residence is not interrupted by occasional absences not exceeding two years. Four years' absence is allowed where total actual residence is not less than twenty-five years. In the case of a seaman, continuous residence is not interrupted by absence on board a ship registered in New Zealand, provided he establishes the fact that his home is in New Zealand.

- (3.) He must not during the past twelve years have been imprisoned for four months or on four occasions for an offence punishable by twelve months' imprisonment.
- (4.) He must not during the past twenty-five years have been imprisoned for five years for any offence.
- (5.) He must not during the past twelve years have deserted his wife and children.
- (6.) He must have lived a sober and reputable life during the past year.
- (7.) His yearly income must not reach £60.
- (8.) The net value of his accumulated property must not be £260 or over.
- (9.) He must not have deprived himself of property or income to qualify for a pension.

Each applicant must apply to the Registrar of the district in which he resides, and fill in a claim form. The Registrar proceeds at once to verify the applicant's statements, and the results of his inquiries are transmitted, with the form of application, to the Stipendiary Magistrate presiding at the nearest Court, when a date is fixed for the personal examination of the pensioner.

The Registrar is the only person outside the Magistrate who is authorized to appear at the investigation of a claim and to question an applicant.

The Magistrate has power, if he so chooses, to hear any case *in camera*, or to dispense with the personal attendance of the applicant, if he is satisfied that the documentary evidence in support of the claim is sufficient to establish it.

The Magistrate intimates his decision to the Commissioner, who, if the pension is allowed, issues a pension-certificate for the amount granted, without which no payment can be received.

Each pension is granted for twelve months, the first instalment being payable on the first day of the month following the date on which the Magistrate grants the pension. A fresh application is required to be made each year for a renewal of the pension.

Payment of the pension is made by twelve monthly instalments at the most convenient post-office.

Instalments are payable on the 1st of the month, but may be collected up to the 1st day of the month following, after which date the special authority of the Minister of Finance is required before payment can be made.

The full pension of £26 is reduced by—

- (1.) £1 for every complete £1 of income over £34.
- (2.) £1 for every complete £10 of net accumulated property.

If the applicant is married the joint pensions of a husband and wife must not exceed, with their total incomes added, the sum of £90.

Income is money, valuable consideration or profits derived by any means from any source, and includes free board and lodging up to £26 per annum, but not sick-allowance or funeral benefits paid by a friendly society.

The income chargeable is that derived during the twelve months preceding the date of application, the Magistrate having power to exempt all personal earnings earned at a rate not exceeding £2 a week, provided it is shown to his satisfaction that owing to loss of employment or any other cause such earnings have ceased.

Net accumulated property is the capital value of all real and personal property owned by an applicant, life assurance policies and annuities excepted, less the following deductions:—

- (1.) The amount of mortgage existing on the property.
- (2.) £340 from the home, including furniture and personal effects.
- (3.) £50 from any other property.

The net accumulated property of a husband or wife for pension purposes is half of the total net accumulated properties of both.

To ascertain whether a pensioner is entitled to a renewal of his pension, he is required each year, shortly before the expiry of the certificate held by him, to furnish the Registrar with a statement of his income during the past year, and also of his property. On receipt of this statement the Registrar proceeds to verify the contents, and then submits it to the Magistrate, who investigates it in the same manner as an original claim, the pensioner being required to attend at the discretion of the Magistrate. The decision of the Magistrate is notified to the Commissioner, who issues a fresh pension-certificate for the amount for which the pension is renewed, and authorizes payment for another twelve months. The expired certificate is retained by the paying officer on payment of the final instalment, and forwarded to the Commissioner, by whom it is filed.

A pensioner may have any instalment paid at any post-office in New Zealand.

If a person is physically unfit to draw his pension in person, he may apply to the Commissioner to have an agent appointed to collect instalments. Any authority issued to such an agent holds good only for the pension-certificate for any one year, but it may be renewed each year when the pension itself is renewed.

Pensions granted to persons maintained in charitable institutions are paid to the governing bodies of the institutions, on production of an authority signed by the local Registrar. A fresh authority is required each month in these cases.

The instalments of a pension already granted to a person when committed to a mental hospital are payable to the superintendent of the mental hospital. An inmate of a mental hospital, however, cannot lodge an original claim for a pension.

The pension being for the personal support of the pensioner, it is absolutely inalienable, whether by way of assignment, charge, execution, bankruptcy, or otherwise howsoever.

No payment is made of an instalment which falls due while a pensioner is in gaol or out of New Zealand.

On the death of a pensioner the portion of the instalment accruing to date of death, together with any unpaid instalment then payable, may be paid if applied to defray funeral expenses, or, in the case of a charitable institution, towards cost of maintenance.

If the Commissioner has reason to believe that any pension has been improperly obtained, he may suspend payment and cause an inquiry to be held before a Magistrate, who has full power to act.

If during the currency of a pension-certificate a pensioner becomes possessed of property or income in excess of the amount allowed by law, the Commissioner may apply to the Magistrate to have the pension cancelled or varied.

A Magistrate has power on his own initiative to review any previous decision, and to cancel or amend any pension-certificate.

Any person who by a wilfully false statement obtains or attempts to obtain a pension to which he is not entitled is liable to six months' imprisonment, as also is any person who aids or abets such person.

It is an offence to receive any money in consideration of the procuring of a pension for any person; and it is also an offence to refuse to answer any question concerning any applicant or any statement contained in any application, the penalty being a fine not exceeding £10 in each case.

Where it has been found that a pensioner has been overpaid, and the Magistrate is of opinion that such overpayment was obtained by fraud, the pensioner is liable, in addition to imprisonment, to a penalty of double the amount paid in excess.

If on the death of a pensioner, or the wife or husband of a pensioner, it is found that he, or either of them, was possessed of

property in excess of the amount allowed by law in respect to the amount of pension granted, double the amount of pension so overpaid may be recovered from the estate so found to be in excess.

If a pensioner is convicted of drunkenness or of any offence punishable by imprisonment for one month or more, the Magistrate has power to suspend his pension for any period from one month to six months for a first conviction. For a second conviction during any pension-year the law provides that the pension must be suspended for at least six months, but not more than twelve months. All orders of suspension under this head are inoperative as long as the pensioner is being maintained in any charitable institution, to the governing body of which instalments are made payable. The pension of any person deemed to be an habitual drunkard is at once cancelled. Subsequent to the date of a first conviction for drunkenness, all instalments are paid only to an agent, who is required to see that the pension is properly disbursed.

Any person otherwise qualified to receive a pension who owns property on which he resides, and which does not permit of the granting of a full pension, may qualify for the full pension by transferring the said property to the Public Trustee. The pensioner is permitted to reside on the property rent-free during his lifetime, but he must pay all rates and charges thereon. If a husband and wife, both being pensioners, are living together, and one dies, the survivor is permitted to continue to reside on the property. On the death of both pensioner and survivor, or where the pensioner is no longer entitled to a pension, the Public Trustee shall sell the property, and, after deducting from the proceeds of the sale the amount of pension paid as a consequence of the transfer of the property, together with his commission and interest at the rate of 4 per cent., shall pay the balance to the person or persons entitled thereto. Provision is made for a pensioner, or survivor, or next-of-kin paying such amounts as aforesaid at any time, with a view to obtaining a retransfer of the property and obviating a sale.

Two registers are kept in the office of each Registrar—namely, a Pension-claim Register and an Old-age Pensions Register.

The Pension - claim Register contains a record of each claim filed, and how it is dealt with.

The Old-age Pensions Register contains a record of each pension granted in the district, as also of each pension transferred from any other district. All changes made from time to time in regard to any pension are entered up in this register.

Each Registrar is required to supply the following monthly returns:—

- (1.) A return of new pensions granted by the Magistrate—to include transfers from other districts.
- (2.) A return of new claims rejected or adjourned by the Magistrate.
- (3.) A return of renewal certificates rejected or adjourned by the Magistrate.

The number of pensioners at the end of each financial year since the Act came into operation, and the gross payments made in each year, are as follows:—

	Pensioners.	Amount. £
At 31st March, 1899 (at £18)	7,443	3,124
" 1900 "	11,285	157,342
" 1901 "	12,405	197,292
" 1902 "	12,776	207,468
" 1903 "	12,481	210,140
" 1904 "	11,926	203,164
" 1905 "	11,770	195,475
" 1906 (5 months at £18, 7 months at £26)	12,582	254,367
" 1907 (at £26)	13,257	314,184
" 1908 "	13,569	325,199
" 1909 "	14,396	336,760
" 1910 "	15,320	362,496
" 1911 "	..	383,392
Gross total	..	£3,150,403

The number and value of existing pensions at each rate on 31st March, 1911, were,—

Number.	Rate. £	Liability. £	Number.	Rate. £	Liability. £
13,936	26	362,336	55	13	715
285	25	7,125	50	12	600
265	24	6,360	33	11	363
185	23	4,255	36	10	360
158	22	3,476	33	9	297
304	21	4,284	26	8	208
159	20	3,180	15	7	105
136	19	2,584	15	6	90
136	18	2,448	9	5	45
72	17	1,224	11	4	44
64	16	1,024	4	3	12
72	15	1,080	3	2	6
57	14	798	1	1	1
			Totals 16,020	..	£403,020

Of the total number of pensions, 87 per cent. were at the full rate. The average amount of each pension was £25 3s. 2d.

NATIONAL PROVIDENT FUND.

THE National Provident Fund was established by Act in 1910, and came into operation on 1st March, 1911. This measure offers facilities for voluntary thrift on the basis of mutual contributions by the State and the individual, and represents a striking departure in social legislation undertaken by the Government of New Zealand, there being particular features in this scheme that distinguish it from the provident systems of other countries.

The Fund is administered by a Board composed of the Hon. the Minister of Finance as Chairman and four members appointed by the Governor, one of whom is the Superintendent of the Fund.

The main object of the scheme is to provide for annuities in old age. This, however, is supplemented by very liberal benefits for the protection of the family from birth to old age.

The system is open to any person between the ages of 16 and 45 years residing in New Zealand, and whose average income during the previous three years does not exceed £200 per annum. There is no medical examination on entry, and the method of joining is extremely simple, the applicant having merely to fill in a form at a postal money-order office and pay a first weekly contribution.

The benefits are as follows:—

- (1.) A payment not exceeding £6 for medical attendance on the birth of a contributor's child or children after contributing for twelve months.
- (2.) An allowance, after three months' incapacity to work, of 7s. 6d. per week for each child of a contributor under 14 years of age; due after contributing for five years.
- (3.) A pension at age 60 of 10s., 20s., 30s., or 40s., according to the scale of contributions.
- (4.) An allowance, on the death of a contributor, of 7s. 6d. per week for each child until 14 years of age, and 7s. 6d. for the widow so long as any child is under 14 years of age; due after contributing for five years.

The maternity allowance is payable only if the combined income of a contributor and wife or husband does not exceed £200 per annum at the time of claim, but this limitation does not debar from the other benefits. The incapacity allowance is not payable where the incapacity is due to the serious misconduct of the contributor, and the amount is not to exceed the pecuniary loss which, in the opinion of the Board, the contributor has probably suffered during incapacity. Further, the income of a contributor during incapacity, independent of the Fund, is not to exceed the rate of £4 per week.

The contributions range from 9d. per week at age 17, 1s. at age 22, 1s. 3d. at 25, and so on to age 45, for the 10s. pension,

the rate being two, three, or four times as much if a higher pension is applied for. A contributor may increase or decrease his pension after entry. The pension will not affect the rights of any person to the old-age pension.

The contributions are payable in weekly sums at any postal money-order office; but, as any number of contributions may be paid at one time, contributors have the privilege of paying as they like by weekly, monthly, quarterly, half-yearly, yearly, or at irregular intervals.

In the event of a contributor leaving the Fund or dying, all contributions (less any benefits received) are returnable. If a contributor dies before the first five years are completed, his representatives receive the contributions he has paid, less anything he received during lifetime by way of maternity benefit. Should he die after age 60, before receiving in pension a sum equal to the contributions paid in during his lifetime, the difference is returnable to his representatives; and, further, if the allowances paid for widow and children do not exhaust the contributions, his representatives are entitled to the residue. If a contributor dies before 60, leaving a widow and no children, all the contributions are returnable, less benefits paid out.

The latitude allowed for arrears is very wide, and covers a period of eighteen months, but after six months a fine equal to one-fourth of the contributions is to be paid. If a contributor is drawing the incapacity allowance he pays no contributions during that period.

Moneys payable out of the Fund cannot be assigned in any way, nor, on the death of a contributor, be assets to pay his debts or liabilities.

The benefits under the Act are guaranteed by the State, which subsidizes the contributions to the extent of one-fourth of the amount paid into the Fund.

RATING ON UNIMPROVED VALUE OF LAND.

THE Rating on Unimproved Value Act, 1896, was passed by the General Assembly to afford local bodies the opportunity of adopting the principle of rating which is expressed in the title of the measure. The Act is now incorporated in the Rating Act, 1908. It is entirely at the option of the bodies to adopt the system, and provision is made for a return to the old system of rating, if desired, after three years' experience of the new one. The Act provides that a proportion of the ratepayers on the roll, varying from 25 per cent. where the total number does not exceed

100, to 15 per cent. where the number exceeds 300, may by demand in writing, delivered to the chairman of the district, require that a proposal to rate property on the basis of the unimproved value may be submitted to the ratepayers, whose votes shall be taken between twenty-one and twenty-eight days after delivery of the demand. The poll is to be taken in the same manner as in case of a proposal to raise a loan in the district under the Local Bodies' Loans Act, 1908.

Under the original Act it was necessary for a minimum number of one-third of the ratepayers to vote, and a majority of their votes carried the proposal. Now, the question of adoption or otherwise is decided by a bare majority of the valid votes recorded, irrespective of the number of ratepayers who have voted.

A rescinding proposal can be carried at a poll by the same means as one for adoption, but not until after three years have elapsed; and, *vice versa*, rejection of a proposal bars its being again brought forward for a similar period.

It may be stated here that in cases where the union of two or more boroughs takes place, the rating system in force in the borough having the largest population shall be observed throughout the united borough.

The valuation roll is supplied to the local authority by the Valuer-General under the provisions of the Valuation of Land Act, 1908, and the definitions of "capital value," "improvements," "unimproved value," and "value of improvements" found in that Act apply also to rating on unimproved value. Provision is made for adjustment of rating-powers given under previous Acts by fixing equivalents. Thus a rate of 1s. in the pound on the annual value under former Acts is to be considered equal to $\frac{3}{4}$ d. in the pound on the capital value.

The adjustments are to be made so that the rates on the unimproved value shall be such as to produce as much as, but not more than, the rates under the Rating Act, 1908. For instance, supposing a local authority has a rating-power up to $\frac{3}{4}$ d. in the pound on the capital value, then it can levy any rate in the pound on the unimproved value of land in its district *so long as the producing-capacity of such rate is not greater than would be the producing-capacity of a $\frac{3}{4}$ d. rate on the capital value of the district.* When a fixed rate, under the older system of rating, is security for a loan, the Controller and Auditor-General is given power to interfere and fix the new rate himself if of opinion that the new rate on the unimproved value does not afford equally good security to the one to be given up.

The operation of the Act does not apply to water, gas, electric light, sewage, nor hospital and charitable-aid rates.

Particulars will be found in Section II, "Local Governing Bodies," of the local bodies that have, up to 31st March, 1911, submitted the question of the adoption of the Act to the ratepayers, and the result of the polling in each case.

SECTION II.

AGRICULTURE IN NEW ZEALAND.

[By M. MURPHY, F.L.S.]

It is generally admitted that there is no part of the British dominions where agriculture, in its widest sense, can be carried on with so much certainty and with such good results as in New Zealand. The range of latitude, extending as it does from 34° to 47° south, secures a diversity of climate suitable for all the products of subtropical and temperate zones, while an insular position is a protection from the continuous and parching droughts which periodically inflict such terrible losses on the agriculturist and pastoralist of Australia and South America.

Again, the climate, although somewhat variable, never reaches the extremes of heat or cold. So genial, indeed, is it that most animals and plants, when first introduced, assume a vigour unknown to them before.

NORTH ISLAND.

All the best forage-plants and grasses thrive most admirably, continuing to grow throughout the year with little intermission. Stock of every sort thrive and fatten rapidly on the pastures, coming to maturity at an early age without the aid of roots or condimental foods. All cereals flourish equally well, more especially Indian corn, which produces from fifty to eighty bushels per acre.

So full is the soil of plant-food that several continuous crops of potatoes or cereals may be taken with little apparent exhaustion. Wheat, oats, and barley thrive where the soil is not too rich; otherwise they produce enormous crops of straw, without a corresponding yield of corn. The tobacco-plant does well, as do also hops and sorghum, broom-corn, peanut, hemp, ramee or rhea (China grass), together with a large variety of economic plants, the growth of which will one day afford employment for a large population. In addition to these, all the British, Chinese, and Japanese fruits, with oranges, lemons, limes, olives, and vines (in the northern part) flourish abundantly, requiring but ordinary care. Potatoes are largely grown, and yield heavy crops.

Most of the country along the south-west and west coast is now taken up, and the primeval forest is fast disappearing before the settler's axe. For the most part the soil is fertile, and the growth of grass and clover is extremely rapid and vigorous when sown on the surface after the felled timber has been destroyed by fire.

To the British husbandman it will seem almost incredible that the best pasture-grasses grow as they do with no other preparation

than the ashes resulting from the burnt timber—no ploughing and no previous loosening of the soil—yet, in less than a year from the date of scattering the seed, this same land will fatten from five to six sheep per acre.

So rapidly are these fertile forest-lands being cleared and converted into pastures that the demand for stock (principally dairy) has greatly increased, and this demand must continue for a number of years before it is fully met.

Those who in the past have watched the progress of New Zealand, especially of the North Island, have always maintained that when the Maori difficulties and other impediments to settlement were overcome, the prosperity of the country would advance at a very rapid rate. This prediction has now been realized, and all that is required to make the present prosperity continuous is the more rapid settlement of our lands with a thrifty class of settlers.

There are millions of acres yet unoccupied, a great portion of which is of good quality, and only waiting the hand of man to make it carry, with very little cost, large herds of dairy stock, with flocks of long-wool and crossbred sheep. The west coast of the North Island is essentially a cattle-country. Considerable areas in the midland districts are adapted to long-wool sheep, as is also the country along the east coast. Much of the country may be described as being good sheep-land, a large portion of which is quite capable of carrying two sheep to the acre, and some of it as many as three or four for several months in each year.

SOUTH ISLAND.

If the North Island has a splendid inheritance in her forests, the South Island can boast of her magnificent plain-lands, rolling downs, and vast mountain ranges, all of which, to a greater or less degree, have already been made to contribute to the wealth of the Dominion.

The central portion of the South Island presented to the first-comers a vast plain, covered only with waving tussock-grass, offering little or no obstruction to the plough.

Travelling south, the country assumes a different character: easy, undulating downs, well watered, here and there interspersed with fertile plains, the greater portion admirably adapted for agriculture, and all of it suitable for pastoral purposes.

The climate of the South Island is not so warm in summer nor so mild in winter as that experienced in the North Island. However, as has already been stated, there are no extremes of heat or cold.

AGRICULTURAL STATISTICS.

The following *résumé* of the statistics for 1910–11 as published in the *Gazette* are sufficient to indicate the trend of the agricultural and pastoral industries, detailed particulars of which will be found in the statistical portion of this work. It will be seen that there

has been an increase of 83,160 acres of wheat as compared with 1908-9, when the statistics were last collected. Oats show a decrease of 153,324 acres as compared with 1908-9. Barley also shows a decrease of 14,435 acres; rye, 378 acres; potatoes, 1,016 acres; turnips, 79,677 acres; rape and kale, 12,183 acres; and other green crops an increase of 1,637 acres. These shortages must not be taken as indicating retrogression in farming pursuits. The shortages are rather due to the drought which prevailed during the growing season of 1910-11, and to the ravages of the caterpillar of the diamond-back moth, the wire-worm, and aphides, which ravaged the forage and root crops.

Notwithstanding these temporary drawbacks, the following comparisons, extending over the last decade, show very conclusively the material progress of the Dominion from an agricultural and pastoral standpoint, which must be considered highly satisfactory:—

The population of the Dominion in 1901 was 772,719, of which 390,786 were in the North Island, and 381,933 in the South Island. The census recently taken gives the total population 1,008,468, of whom 563,991 were in the North Island, and 444,477 in the South Island.

Cheese, Butter, and other Products.—In 1901 the value of the butter exported amounted to £790,150, and on the 31st March, 1911, to £1,860,546. The cheese exported in 1901 was £248,883; in 1911 the value had increased to £1,216,137, showing that the value of the dairy product exported from the Dominion had increased in ten years from £1,039,033 to £3,076,683, or about 200 per cent.

Sheep.—The sheep returns made in 1901 totalled 20,233,099; while in 1910 the total had risen to 24,269,620, of which increase 2,919,484 are claimed by the North Island—equal to nearly 30 per cent., and of the South Island to 21·30 per cent., the increase for the whole Dominion being a little over 25 per cent.

Frozen Meat.—The statistics referring to frozen meat are equally satisfactory. Shipments made in 1902 as compared with 1911 are as follows: 1902—Beef, 216,881 cwt.; mutton, 858,519 cwt.; legs and pieces, 56,163 cwt.; lamb, 560,375 cwt. In 1911—Beef, 500,022 cwt.; mutton, 1,022,872 cwt.; legs and pieces, 46,009 cwt.; lamb, 1,167,980 cwt. The financial returns from the exports show an increase of £2,095,513.

The total value for the period advancing from £2,077,501 for the year ending 31st March, 1901, to £4,173,014. During the period under review the number of frozen lambs exported increased from 1,353,272 to 3,839,922, an increase of 2,486,650. The same satisfactory financial state of things pertains to wool. The wool exported in 1902 amounted to 142,246,848 lb., valued at £3,118,181; ten years later—viz., 1911—shipped 182,883,067 lb., valued at £7,194,444.

The sheep returns, made up to the 30th April, 1911, show that the total number of sheep in New Zealand was 23,996,126, a decrease of 273,494 as compared with 1910. This is entirely due to the shortage of feed during the continued drought last season.

THE FARMING OUTLOOK.

Before the advent of the freezing-chamber, sheep-farming could only be carried on profitably on large areas with large flocks, for the reason that wool and tallow were the only marketable products, the sale of fat sheep and lambs being confined to supplying the demand for local consumption. The development of the meat-export trade which began in 1880 has completely altered the condition of things from an agricultural point of view. Almost every farmer, small and large, now keeps his flock of breeding-ewes for the production of lambs for freezing, thereby necessitating the growth of large areas of root and forage crops, and so bringing about a greatly improved system of farming when compared with the previous system of universal corn-growing and boiling-down.

The season of 1910-11 has resulted in better crops of cereals than was anticipated during the early months of the growing season. The long-continued spell of dry weather, lasting for many weeks at a time, accompanied by hot scorching winds, threatened disaster to both farmers and pastoralists. Occasional showers, few and far between, saved the position so far as the cereals were concerned; but the case has been far different as regards the root and forage crops. It is doubtful if the farmers of Canterbury, North and South, including North Otago, have ever suffered more seriously from the prolonged attack of the caterpillar of the diamond-back moth (*Plutella cruciferarum*) and the turnip aphid, the combined attack of both of which put a complete stop to the growth of turnips, rape, and kale, so much so that many of these crops have been rendered comparatively useless. Even when the turnips attained to a medium size they were attacked underground by the larvæ of a species of click beetle known as wire-worm. Many crops which partially escaped the former pests were, to a large extent, rendered useless by the latter.

The long continuance of warm dry weather fostered the development of all kinds of insect pests to a marvellous extent.

The increasing development of the dairy industry and the advent of an efficient milking-machine—now assured—has caused the demand for land to go on increasing in all parts of the Dominion, with a corresponding increase in prices of suitable dairy farms and dairy stock. As an instance of this, we may refer to a block of reclaimed swamp land, part of the Cashmere Estate, near Christchurch, which was recently sold in farms ranging from 10 to 100 and 150 acres, and which sold readily at from £50 to £100 per acre, the bulk averaging over £70. It might be asked how

5 per cent. can be made on the outlay. The answer is found in the fact that, with the aid of hay and mangels, that land will carry two cows to the acre, yielding from £12 to £15 per cow and more from the sale of new milk in Christchurch.

The area of land under occupation in New Zealand in 1910-11 was 40,238,126 acres; the area under cereals and pulse amounted to 1,015,822 acres; under green crops for the same period was 713,682 acres: total area under crops for 1910-11, 1,729,504 acres. In sown grasses on ploughed land, 5,000,226 acres; on land not ploughed, 9,214,515 acres; in tussock or native grass and unimproved land, 23,972,236 acres; in fallow, 209,973 acres; in plantations, orchards, and gardens, 110,892 acres; and vineyards, 780 acres.

WHEAT.

The Canterbury Plains, the great wheat-growing district of the South Island, extend 150 miles north and south, running inland from the sea for forty miles, the whole forming an area of over 3,000,000 acres. A great portion of this vast plain is admirably adapted for the growth of wheat, barley, and oats, and all the best cultivated grasses and forage plants, the growing of which has been carried on extensively since the earliest settlement of New Zealand. The total area under wheat for the season 1910-11 was 322,167 acres (exclusive of 14,222 cut for chaff and feeding). The average yield per acre in bushels was 25.73. This low average can only be accounted for by the drought which prevailed during the growing season; total yield, 8,290,221 bushels. The land in Canterbury is for the most part free from stones or impediments of any kind. Single-furrow ploughs are now rarely seen, double- and three-furrows being in general use, and an occasional motor and steam plough. Three horses, sometimes four, with a man or a boy, can turn over three acres per day on the plains, at a cost of 5s. or 6s. per acre. A stroke of the disc or other harrow, followed by the seed-drill and light harrows, completes the operation of sowing.

Seed-sowing commences in May, and can be continued as weather permits through the winter, and in the heavy swamp land (drained) on into September and even October. From $1\frac{1}{4}$ to $1\frac{1}{2}$ and 2 bushels of seed per acre are usually sown, the quantity increasing as the season advances.

The following paper from the pen of Professor Lowrie, formerly Director of Canterbury Agricultural College, now Director of Agriculture for South Australia, is a valuable contribution to our wheat-growing literature:—

Wheat, as the bread corn of civilization, will always hold a place of high importance among the world's farm crops, though, as the result of the opening up of new countries where, as far as conditions allow, it has been made the pioneer main crop—often his only crop—the position of wheat in highly farmed countries has become less prominent.

PREPARATORY CULTIVATION.

Wheat can be taken almost anywhere in a rotation, though, of course, the success of the crop is modified by the crop preceding it, and the cultivation necessary in preparation, for the seed varies widely according to its position on a rotation. It likes a firm, compact seed-bed; in fact, a seed-bed with a good tilth, but well consolidated, is almost a fundamental condition of success. Accordingly, the cultivation of ploughing immediately preceding the crop should be shallow, say, 3 in. to 4 in. deep, though if the land has been ploughed deeply 6 in. or 7 in. for the preceding crop, such as rape, so much the better for the wheat to follow it. In Autumn the seed-bed should not be made too fine; so long as there is a fair tilth to receive the seed the presence of a fair amount of small clods is an advantage, as by crumbling through the action of frost they prevent the surface setting too hard in the spring, and they offer a certain amount of shelter in the winter. The very heaviest yields of wheat are obtained after a summer bare fallow, as might be anticipated from the effect of the repeated workings given to the land in encouraging nitrification, in mellowing the soil, in retaining moisture, and in thoroughly cleaning the land of weeds. But the practice is too expensive in these days of forage and fallow crops, where the rainfall is adequate, and is only likely to be resorted to when necessary to clean land very foul, or infested with noxious weeds.

After peas, beans, or other nitrogen restoring crop, wheat is ever found to thrive well. After peas it will often suffice to give the land a double cut with the disc harrows set with deep cut. Pea stubble is generally loose, or relatively free, and ploughing is therefore unnecessary, and only to be adopted on land too stiff for the disc harrows to work. This discing should be done as soon after harvest as practicable, that the seeds of weeds may be germinated to be cleaned with the scarifier preliminary to sowing. The effect of following a leguminous crop on the character and quality of the grain is very marked as well as on the yield.

After potatoes, wheat almost invariably does well, as the working of the land which potatoes necessitate leaves it in excellent condition, and there is further available a considerable residue of the manure applied. In this case, as after peas, ploughing, even shallow has no advantage over the disc harrow in preparing a seed-bed, and generally when the tops have been raked off the spring-tooth cultivator gives quite sufficient seed-bed. After rape is another favourite position for wheat, as the land is enriched by the residue of the manure applied to the rape, and the dung of the sheep consuming the crop. The large number of subordinate roots and the depth to which they penetrate have also an effect on the soil and subsoil beneficial to the succeeding wheat.

After clover, lucerne, or lea, more care and good judgment is necessary in preparing for wheat than in any other position. To lift the land in the end of May or beginning of June, disc harrow, and sow right away, invariably results in a return far below the possible. Such land is never consolidated sufficiently, and the turf is not killed. Compared with this practice it will pay handsomely to have the field skim-ploughed in early autumn, let it lie for a while, then harrow and cross plough about 5 in. deep, and at seed time harrow well to give increased consolidation. For best results after lea it is imperative that the seeding be done on a stale furrow, and the land is all the better for having a heavy roller over it. When the lea is lifted immediately before sowing, the wheat gets comparatively little advantage from the humus except, perhaps, in the conservation of moisture, as the nitrifying ferments are practically dormant by the time the land is ploughed, and do not regain activity until early summer, when the wheat is well forward. The greater part of the material constituting cereals, be it remembered, is assimilated between the periods of tillering and the close of the blooming, and therefore if, by lifting the lea earlier in the autumn, more nitrogen is available in the spring, one of the reasons accounting for the fact that the crop on land so treated, more than pays by extra yield for the sacrifice of feed is evident. Indeed, it often happens that on land lifted from lea in early winter the second successive wheat crop is better than the first, as the intervening summer has allowed of the nitrification of most of the organic matter constituting the turf.

MANURING.

Wheat is proverbial for making the best use of the inherent fertility of the land in the absence of manure directly applied. It is this characteristic that led to the practice in Britain of manuring wheat indirectly through the preceding crops—roots, potatoes, pulse or forage crops, heavy dressings of dung, artificial manures, or dung and artificials in various proportions are applied to these crops with the aim of getting correspondingly heavy returns from them, and leaving a considerable residuum well incorporated with the soil for the succeeding wheat crop to utilize. In the case of dung, the seeds of weeds have germinated, and have been destroyed, and the organic matter has had time for further decomposition and blending with the soil before the seed is sown, with the result that the wheat benefits from the residue of the dung more than if a corresponding amount had been applied with the seed. On our good wheat lands, however, the conditions are very different. Farm-yard manure in quantity is not available, and in our warmer climate is less useful for wheat, even if it were available. The land is not under-drained, or if under-drained at all, the drains are much less frequent, and consequently the leaching of nitrates is less, and the need for nitrogenous manures less. The growth of herbage on the pastures is much denser and more luxuriant, and there is a correspondingly greater proportion of organic matter, when the land is lifted after a given time in pasture. The activity of the nitrifying ferments is increased by the higher temperature we experience, and is continued through most months of the year. Consequently with more humus, nitrification more rapid and more prolonged, and withal, less leaching of nitrates taking place, it is to be anticipated that nitrogen is less in demand for wheat, and every-day experience on this farm confirms the expectation. On lighter lands, or lands with an open subsoil, the position is different, and if wheat be attempted on such it will probably be found that the application of a nitrogenous manure, as part of the dressing, is desirable, but lighter lands can be used to better purpose under other crops. On good wheat land exuberance of vegetation often injuriously affects the yield of grain by favouring rust, by increasing the risk of lodging, and by bringing about a condition of the crop more liable to blight. This last consequence is important, for bursts of hot weather, which occasionally occur at the time when the grain is filling, compromise the yield most seriously in crops the most luxuriant. The movement of elaborated material from the leaves and stems to the ears is suddenly arrested, the crop yellows off too quickly, and a more or less shrivelled sample of grain results. Therefore, as the effect of nitrogenous manure is to increase vegetative luxuriance, and to produce a soft plethoric plant which succumbs more readily to sudden heat waves, or pinches of drought, it should be applied with caution under our conditions.

Phosphatic manures are believed to be of much more importance in the production of wheat in Canterbury than nitrogenous manures. Indeed, there seems good reason for the hypothesis that, if wheat be not grown too frequently, and a judicious rotation of forage crops, roots, leguminous crops and temporary pastures in which clovers are prominent, be adopted, it will be found that if the requirements of the soil in the matter of phosphates be met liberally, nature will go far to maintain the nitrates, except for such crops as mangels, kale, and rape, for which dried blood or other nitrogenous manure is indispensable, or at least an advantage. But phosphatic manures are beneficial beyond question, and their application is particularly to be recommended. In the case of land that has been badly farmed—submitted to exhaustive cropping without any effort to maintain fertility—they are indispensable to good yields. Dressings of phosphates, however, will be found almost invariably to produce a profitable response in the crop when applied with the seed, in the autumn or in the spring, for their influence is manifold. For example, rapid root growth is encouraged; tillering is promoted; maturity is hastened; spells of drought which often prevail in the spring are better withstood; and the quality of the sample is improved, the grain being better filled, and of a better colour. The fact that the transpiration of water necessary for the production of a certain weight of dry matter in cereals is less when saline manures have been applied, is

of capital importance, and explains why phosphates, if other saline matters necessary be present in sufficiency, help the plant to resist periods of droughts. Of the phosphates on the market superphosphate may be taken as the most generally useful. On land with a high percentage of organic matter, or soil somewhat sour, basic slag would be probably most useful, but, like nitrate of soda, it has not been put on the market so far at a price to justify its use. The superphosphate, as a rule, does not run altogether satisfactorily through the drill, and accordingly it is generally advisable to mix with it thoroughly a little of the freezing companies' manure, say, one in six, or to mix it with wood ashes, shortly before application in such quantities as will suffice to make the mixtures run well. When a rotation of crops is practised, it will be found that a dressing of $1\frac{1}{2}$ cwt. to 2 cwt. per acre of superphosphate with the mixed material added proportionally, when such mixing has been required, will produce heavy crops, and, on the average, be sufficient. When wheat is grown after wheat superphosphate straight will scarcely suffice, or even when wheat is grown after oats. In that case it will be found advisable to mix superphosphate and kale manure from half and half to two of superphosphate to one of kale manure according to the degree of exhaustion of the field or the frequency with which it has been cropped. On lighter lands generally a mixture of dried blood and superphosphate one to two, or of kale manure and superphosphate half and half, will give better results than superphosphate alone, but on all wheat-growing land proper superphosphate alone will suffice, if it be dry enough to run through the drill freely. Further, it will be found that the influence of such direct manuring of wheat will tell favourably on the land when under grass or other crops.

QUANTITY OF SEED PER ACRE.

The quantity of seed to sow varies of course with the climatic conditions, the nature of the soil, the time of sowing, the size of the grain, and the habit of growth of the variety to be sown, and extends from one bushel per acre to two bushels. In a dry climate one bushel per acre is ample, but on good wheat lands in Canterbury from one and a quarter bushels to one and three-quarter bushels per acre should be sown. Lighter lands are sown more thinly than good strong soils, and the earlier the date of sowing the lighter should the seeding be in both cases. Wheats also that tiller freely may be sown more thinly than wheats which run quickly with fewer stems, such as the spring wheats. The careful selection and preparation of seed wheat is ever well repaid. For example, it should be graded, and the lighter or shrivelled grains taken out. Careful experiments conducted in France by Desprez proved that the gain in yield resulting from grading the wheat with the "Trieur" varied from 22 to 28 per cent. in favour of the large plump grains as compared with the yield of the smaller or shrivelled grains sown under similar conditions.

CULTIVATION.

Harrowing wheat in the spring is almost invariably an advantage to the crop, and on heavy lands it can scarcely be overdone. On thick crops it is an important, almost necessary, operation for the very best results. The horse-hoeing of wheat is now almost generally abandoned in favour of good harrowing, which is almost as efficient, and is much cheaper. Rolling has not so much to recommend it as harrowing, though in light lands it is useful. On heavy land, however, there is no manifest advantage to repay the cost of rolling in the spring, unless where the young wheat has been badly thrown out by severe frosts. Feeding down early crops with sheep is often beneficial to them, but occasionally it is injurious. When a dry season supervenes, on a crop fed down somewhat late, the yield will be diminished, and, as a rule, it is well to feed down only the early crops which, in a favourable season, might lodge before harvest.

TIME OF CUTTING.

For flour, wheat is better for being cut before it is dead ripe; for seed, it is to be preferred when it has been allowed to ripen completely. The rule then is to cut wheat when the grain is in the dough state for milling—when it ceases to show

a milky fluid in section, and has a consistency similar to dough or cheese. However, as the grain fills from the outside inwards it is possible to cut too early, with the result that the inner starch cells of the grain are not fully developed, and the sample weighs less per bushel, but in view of the risk of shaking, and on the knowledge that in this climate the grain continues to fill in the stook, it is well to cut just as the milky stage of ripening is being completed.

VARIETIES.

New Zealand wheat in Mark Lane ranks much as English-grown wheat in quality. It works soft and weak as a rule; does not yield with the miller so much flour as Australian; and in purity of colour comes lower. In bread-making capacity, or strength of flour, it is classed as low to fair, while Australian ranks as fair, and famous qualities such as Manitoban No. 1 are described as good to full, and No. 1 Hard Dulluth and No. 1 Northern Spring (United States) as full. The quality in the matter of strength of flour is, unfortunately not to be controlled to any great extent by the skill of the farmer in selecting varieties, or in breeding strains to yield strong flour: the chief determining factor is undoubtedly the climate, in the question of strength, and it is found that in countries where the ripening process is most rapid, through high summer temperature, long daylight, and clear dry weather, that wheats yielding the strongest flour are grown. If some of the wheats yielding strongest flour were introduced here, such, for example, as the Fife types, it would be found that in a few seasons the character of the grain in this characteristic would degenerate, though, at the same time, the matter well deserves the attention of farmers, as intelligent effort no doubt would result in improvement. There is also, of course, the practical and financial aspect of the question to be considered. Wheats of the strong type grown in the States and Canada never, in the writer's experience at least, equal in yield the best soft white wheats that are now grown in New Zealand, and it may pay to grow the heavier yielder for a lower price per bushel. For example, 50 bushels per acre at 3s. 4d. (£8 6s. 8d.) will pay a farmer better than 45 bushels at 3s. 7d. (£8 1s. 3d.). A characteristic indispensable to varieties to be grown here, and always to have first consideration, is resistance to shelling out or threshing by wind, and in this particular many of the strong flour wheats are weak. The best soft white wheats of Europe yield most profitable returns here, but, of course, it does not follow that improvements in the matter of strength cannot be gained by careful selection or by cross-breeding.

OATS.

Otago and Southland districts excel in the production of oats, which is their principal cereal crop. The total area under this cereal for the season 1910-11 was 302,827 acres, averaging 33.41 bushels per acre. The area reserved for chaffing and feeding-down was 290,569 acres.

The growth of wheat in the South is extending, and will continue to do so as the land becomes sweetened by tillage and warmed by drainage. 11,715 acres of wheat were grown in 1910-11, as against 3,510 grown in 1908-9. The yield of oats in Otago and Southland varies from 40 to 80 bushels, and even 100 bushels, per acre.

BARLEY.

Malting-barley of very superior quality is grown in Nelson and Marlborough, where the soil and climate are particularly adapted to its culture. In 1910-11 33,491 acres were grown, producing 27.68 bushels per acre. Much larger yields are frequently secured in more favourable seasons.

The growing of this cereal for malting purposes requires more attention than it has yet received in New Zealand. It is claimed for this crop that it will show a better result than wheat, for the following reasons: (1) It is less exhaustive to the soil; (2) it gives an average yield of from 10 per cent. to 20 per cent. more than wheat; (3) the growing crop in favourable seasons can be fed off twice, or even three times, to the advantage of the subsequent yield of grain. Land of a light and calcareous nature will give a barley thin in the skin, and particularly suited for malting purposes. Barley is not a difficult crop to raise, but there are certain points that need careful attention, which, if neglected, would probably result in the production of an inferior sample, which would hardly pay for growing.

ROOT-CROPS.

Potatoes: Potatoes are largely grown throughout New Zealand. On suitable soils very heavy crops are raised, it being no uncommon thing to dig from 8 to 10 and 15 tons per acre, although the general average is much lower, for the reason that unsuitable land is frequently devoted to this crop. The area under potatoes in 1910-11 was 29,023 acres. The bulk of the crop is planted without manure, but, where used, bone-dust, superphosphate, blood-manure, or animal guano (which may be procured of first quality from the local manure manufactories), from 1 cwt. to 2 cwt. per acre, is applied with good results; recent experiments in Canterbury have amply demonstrated that the application of a much larger quantity of manure per acre is a remunerative investment. The potato is, however, an expensive crop to grow, costing from £5 to £6 per acre, and it is perhaps the most precarious of all crops, being materially affected by drought, but more particularly so by early and late frosts. The past season was a fairly favourable one for this esculent, notwithstanding the light rainfall; the average yield was estimated at 5 tons per acre, but in more favourable seasons as much as 15 and even 20 tons per acre are raised. The disease (*phytophthora infestans*), although present in many districts, has not affected the general average to any great extent. The warm, dry season experienced had much to do with our comparative immunity from the disease. The practice of spraying for fungoid infestations should be encouraged, as it is well known that no fungoid growth can exist when treated with a solution of sulphate of copper, known as Bordeaux mixture.

Land for potatoes is usually broken out of grass, skim-ploughed in autumn, ploughed deeply in spring, and thoroughly tilled; or potatoes may be grown in drills opened and closed with a double-furrow plough. The seed—15 cwt. per acre—is then ploughed in under every third furrow, the after-culture consisting of harrowing just as the crop is appearing over ground (by this means myriads of seedling weeds are destroyed); drill-grubbing, hoeing, horse-hoeing, and earthing-up being the subsequent operations. Heavy crops of

wheat, oats, barley, beans, or peas can always be relied upon after potatoes. Professional growers have sent out new varieties in quick succession, with high-sounding names, claiming for each superior qualities from anything previously grown, offering them at fabulous prices, which were readily obtained. These were to revolutionize potato-growing. The National Potato Society which boomed the potato has died the death of all hysterical bubbles. When the society was founded the whole world was talking of potatoes, and sensational new varieties were as plentiful as mushrooms in autumn. With a big programme, and apparently a large field of work before it, the National Society started on its meteoric career, and for a time, like the Northern Star, it went strong; but the society dwindled when the boom declined and died, and nothing now remains but the memory of the money wildly lavished in procuring certain inflated varieties which, like the boom, have disappeared, leaving the old Up-to-Date, Derwents, kidneys of sorts, and a few new varieties masters of the field. If only one really good potato was added to our present stock, the time and money spent on the boom would not have been entirely wasted.

The turnip crops of 1910-11 have been generally unsatisfactory, particularly so in Canterbury and North Otago, owing to the ravages of the caterpillar of the diamond-back moth, the wire-worm, and aphides. The loss was severely felt before the spring growth of grass took place. The splendid rains, however, which fell soon after harvest, causing a fresh spring, have proved of great service to farmers and pastoralists. They early depredations of the diamond-back moth in particular are causing farmers to inquire if some other plant cannot be found to take the place of the turnip. Italian ryegrass, tares, and oats are excellent fodder plants, but could not be substituted for the turnip, which is admirably adapted for growing on our lighter soils—probably better than anything else which could be found.

The late Miss Ormerod, in her "Injurious Insects," refers to an infestation which ravaged the turnip-crops of Great Britain and Ireland in 1851. All cruciferous plants are subject to its attack. It is exceedingly difficult to successfully deal with the pest, but severe attacks have fortunately not been continuous from year to year; were they so, turnips and rape would go out of cultivation, the loss resulting from which would be difficult to estimate, as the success or otherwise of the export trade in mutton and lamb is at present largely dependent on these crops. In the southern portion of the South Island the crop was fairly good, not suffering to the same extent from the pests referred to. The area under this crop for the season 1910-11 was 450,959 acres, being a decrease of 79,677 acres as compared with 1908-9.

Rape is largely grown as sheep-feed, and may be sown either in early spring or immediately after harvest, the stubble being skim-ploughed or broken up with the spring-tined cultivator. This crop

is invaluable in the early spring, and may be fed off in time for oats or barley. Dairy cattle, however, should not be fed on rape, as doing so destroys the flavour of the milk. Rape is more valuable for fattening lambs than the turnip. The area under this crop for the season 1910-11 was 208,057 acres, being a decrease of 12,183 acres.

Kale: Mr. Lowrie, the late director of Lincoln Agricultural College, was the first to demonstrate the great value of kale as a supplementary forage-crop. Its cultivation has now become pretty general. There are several varieties of kale which have been cultivated for a lengthened period in Europe. For some reason its culture has hitherto been much neglected in New Zealand. Mr. Lowrie has, however, succeeded in bringing its value before the farming community, with the result that it may be said to be fairly established. It is not intended that it should take the place of rape. As a forage-crop, however, the kales compare very favourably with the varieties of rape. It will stand drought better than rape; it is less liable to blight; it is healthier for stock. Mr. Lowrie remarks: "I have never known kale to injure stock, either sheep or cattle, and I have frequently had to take lambs off rape, when they have begun to die from irritation in the intestines, and put them on kale to recover." The value, however, of the food from a fattening point of view is scarcely so high as rape. Young stock will fatten on rape quicker, but wethers and two-tooth sheep and over seem to do as well on kale as they do on rape, and the percentage of deaths will always be lower. A good block of kale should always be grown, for reasons above stated. It has another advantage—viz., it can with impunity be fed to dairy cows with little fear of tainting the milk, as is the case with rape.

The cultivation of kale consists in sowing the seed in drills, 21 in. apart, with 1 lb. of seed per acre. Sown in September, the crop will be ready for grazing in February, and can be grazed right through the autumn. Stock should be taken out about the end of May and the crop left until the spring, when in the month of September it will yield an enormous amount of forage; but care must be taken not to feed it too closely at any time. The plant is a gross feeder, and must be treated generously if sown in indifferent soil. From 2 cwt. to 3 cwt. per acre of manure should be drilled in with the seed. The variety known as "Thousand-headed kale" is the most generally useful.

Mangolds and Carrots are largely grown in some districts. They cost more money per acre than turnips to produce, as they must be hand-hoed and thinned; nor are they so suitable a crop for cleaning the land. Turnip-sowing does not commence till November or December, affording ample time for the destruction of seedling weeds during the spring months; this important opportunity is largely lost in the culture of the mangold, which is usually sown in October. Mangolds are, however, an invaluable crop on a stock-farm, as they

do not reach their prime condition until the turnip-supply is exhausted, usually in August. From 30 to 60 tons per acre is not an uncommon yield of these roots, often without the aid of manure, on rich swamp land. Experiments and analyses show that the orange and yellow Tankard are more nutritious than any of the long varieties. The area under this crop is annually increasing as its value becomes better known; also its comparative immunity from the attacks of grubs or insects.

Carrots are also a valuable crop, especially for horses; on sandy loams the yield reaches 15 to 20 tons per acre. Carrots impart a pleasant flavour to butter, and should be largely grown for dairy stock. Like the mangold, the area under this crop is also increasing from year to year.

SEEDS.

Clover: Saving clover for seed in favourable seasons is a lucrative industry, adding materially to the farmers' income. Clover is sown with a spring crop, usually of corn, lightly grazed in the following autumn, and then reserved for a crop of hay, which, according to the season, yields from 2 to 3 tons per acre when cut in November or early in December. Some farmers prefer feeding off with sheep in preference to mowing for hay. The after-growth is then allowed to flower and seed, which it does very freely. Thousands of humble-bees may be seen in the clover-fields during the months of January, February, and March. The seed ripens in March, and is then cut and dried, and threshed out by machines known as clover-shellers. An acre of clover may yield in hay and seed from £8 to £10. It must, however, be stated that, while a good crop of clover-seed is most lucrative, it is nevertheless a most precarious one. Owing to lateness of the season of ripening, it sometimes happens that the fertilization is imperfect, resulting in a majority of barren heads. This gave rise to a controversy as to whether the proper bee has been introduced. The point was referred to the late Miss Ormerod, the English entomologist, with specimens, which that lady identified as *Bombus terrestris* and *subterraneus*. The former is declared by Mr. Darwin to be useless as a fertilizer for the reason that its tongue is too short. This question has again been revived, it being thought that while some of the varieties introduced have proved very valuable as fertilizers it is quite possible that there are others still more so. The Canterbury Agricultural and Pastoral Association set up a sub-committee to collect information on the subject. As the result of the inquiries made, Messrs. Sladen, Ripple Court, Dover, England, and A. H. Ham, Oxford, England—well-known scientists—were asked to co-operate in collecting the most suitable species. A small consignment (the season being too far advanced) was shipped by the s.s. "Paparoa," which arrived in Lyttelton on the 24th February, 1906. Out of fifteen sent ten

arrived alive—viz., four *Bombus lapidarius* (the red-tailed bee), and six *Bombus hortorum*. These were released in clover-paddocks at and near the Lincoln Agricultural College. Another consignment of 165 red-tailed queens arrived at Lyttelton per steamer "Paparua" in December, 1906, of which 94 were found to be dead, the balance (71) soon revived when exposed to the warm sun, and took flight. The third consignment of these insects arrived per s.s. "Ruapehu" in December, 1906. The shipment consisted of 145 queens, of which 62 were found to be alive; these were liberated at Mr. H. E. Peryman's farm at Tai Tapu, in the midst of luxuriant clover paddocks.

Humble-bees were first successfully introduced into Canterbury in 1885. The variety was *Bombus terrestris*; and they were found to spread over an area of a hundred miles in less than twelve months.

The red-tailed bee is easily distinguished from any other species; the posterior is closely covered with red hairs, hence its name. Although a couple of specimens were reported last summer, it is still problematical whether the introduction of *Bombus lapidarius* has been quite a success. The Committee of the Canterbury Agricultural and Pastoral Association deserve the gratitude of the farming community. The importations cost the association £100. The Entomologist of the Dominion of Canada has promised to send a shipment of bees as soon as practicable, and it is probable that some may also be procured from California.

White and alsike clover are now grown in considerable quantities. White clover yields enormously: as much as 300 lb. of white and alsike seed has been obtained per acre. These clovers are not dependent on the action of the humble-bee for their fertilization; they mature earlier, and are more easily threshed and cleaned than cow-grass or red-clover.

Grass-seed Saving: All the most valuable British grasses flourish throughout New Zealand. Cocksfoot has been for many years a staple product of Banks Peninsula (Akarua County), where the soil for the most part consists of decomposed volcanic rocks and vegetable mould. Large quantities of this seed are also raised in the North Island and in many other parts of the Dominion as well. The seed is of the finest description, frequently weighing 20 lb. to the bushel, 12 lb. being a standard bushel. Cocksfoot thrives on a very wide range of soil, from the richest to the poorest, preferring, of course, the former. It may be found on the dry stony plains of the interior, green and healthy, when the surrounding herbage, introduced or indigenous, has given way to the heat of the summer sun. The area under this grass in 1910-11 was 41,918 acres, yielding 5,868,520 lb. of seed.

Growing ryegrass (Perennial and Italian) for seed is also an important industry. The seed is usually gathered by stripping, when the crops are heavy they are cut and tied as corn, and after-

wards threshed by machinery. The yield varies from 20 to 50 bushels per acre, weighing from 25 lb. to 32 lb. per bushel, 20 lb. being the standard weight. A common practice is to graze the land till midsummer; to take the stock off for a few weeks, and then to run the stripper over the ground. By this primitive method 10 bushels per acre of perennial ryegrass is sometimes secured, of the finest quality. Ryegrass-seed is usually in good demand; the price varies according to the season; the usual price, however, is from 2s. 6d. to 3s. 6d. and 4s. per bushel. Crested dogstail, sheep's fescue, and meadow fescue are also successfully grown, particularly in the North Island, for seed and for pasture. 46,706 acres were under ryegrass in 1910-11, yielding 1,167,650 bushels.

Many of the indigenous grasses of New Zealand are possessed of considerable feeding-value, but, unfortunately, few of them will stand too close feeding. The action of fire is especially injurious to most of them. Of recent years much has been said in favour of *Danthonia semiannullaris* (one of the native oat-grasses) as a grass particularly adapted to some of the poorer soils in the North Island, where it is said to thrive admirably; it is also said to be able to resist the action of occasional grass-fires. There are many varieties of *Danthonias*, from the giant, coarse-growing snow-grass or oat-grass, to the fine-leaved varieties found in almost all the natural pastures. They are for the most part valuable for sheep pastures.

Small Seeds: New Zealand, from the nature of her soil and climate, offers a fine field for growing all kinds of farm and garden seeds. This circumstance has already attracted the attention of some of the larger seed-merchants of Great Britain, whose agents occasionally visit New Zealand with a view to inducing farmers and others to grow certain kinds of seeds. This industry is capable of great expansion, and the Department would be doing good work were they to take the matter in hand. The industry is peculiarly adapted to small holdings, and well suited to young persons, the work being light and of an interesting character. Ready sale can be found for carefully grown and carefully cleaned garden-seeds if grown in quantity. A large export trade in seeds should be encouraged, subject to inspection and grading similar to that exercised over butter and cheese.

OTHER CROPS.

Pulse: Peas and beans are largely grown for pig and horse feed, and for export; they form an excellent preparation for wheat. An extensive trade in peas of a certain description is done in the manufacturing towns of Great Britain; and efforts are being made to secure a share of this trade by producing peas suitable for splitting for human food. The business should prove a most remunerative one. Thirty bushels of peas per acre is considered a fair crop, while 60 to 70 bushels of beans are often secured. As showing the extraordinary fertility of some of the lands of the Dominion, it may

be mentioned that beans and wheat have been grown alternately on Kaiapoi Island (Canterbury) for thirty years without any apparent diminution of yield, the crops of recent years being as abundant as those grown twenty-five years ago—40 to 50 bushels of wheat and 60 to 70 bushels of beans being the usual return per acre.

Cape Barley and Winter Oats: The demand for early spring feed has resulted in the growing of these plants for forage. Their extreme hardness renders them well adapted for autumn sowing. If sown in March they are ready for feeding-off in May; they may be fed off again in July, and on till the beginning of October, when, if allowed to run to seed, they will produce 40 to 60 bushels per acre, or they may be ploughed in as green manure for turnips—a practice which is not often adopted, it being found to be more profitable to use artificial manures for each crop.

Tares are also grown, but not so largely as they deserve to be, especially for dairy stock. Mixed with oats, barley, or rye, they are excellent milk-producers; and when grown luxuriantly they destroy all kinds of weeds, and leave the land in fine condition for a spring corn-crop.

Linseed (European Flax): The cultivation of this useful plant is gradually increasing; it is a great soil exhauster and a promoter of the growth of weeds, as the soil has to be reduced to a very fine tilth before sowing. This crop requires a very large amount of labour when grown for fibre purposes; its cultivation therefore is confined to small areas for the manufacture of oil and oilcake, and for cattle food. The straw which might with advantage be turned to account is neglected.

New Zealand Flax (Phormium Tenax): This useful plant occupies a large area of the swamp lands of the Dominion. The manufacture of fibre from the leaves has in the past been a profitable business, employing a large number of persons. The value of the fibre would be greatly enhanced if some effective means could be found for freeing it from resinous substances. It is more than probable that a much finer quality of fibre will be produced (greatly enhancing its value) when the field-culture of the plant is more widely adopted; at present the leaves are gathered indiscriminately, young and old, at the same time once in every three years. Under cultivation the outside leaves only will be cut annually, thus securing a uniformity of quality—a vital point in determining the price of the fibre.

Lucerne: This permanent fodder-plant thrives admirably in most parts of New Zealand, provided the land is not waterlogged; and, if properly cultivated and well attended to, particularly in its early stage of growth, it will continue to yield liberal cuttings for seven or eight years, or even longer. This is a most excellent crop for the small or large farmer, furnishing, as it does, an abundant supply of succulent fodder, in deeply cultivated soils, during the drier months of midsummer. All farm animals are partial to

lucerne; pigs thrive upon it. No farm should be without a well-cultivated plot of this plant. In deeply cultivated land lucerne will yield four or five cuttings during the season, producing from five to ten tons of green soiling per acre at each cutting. No matter how hot and dry the weather may be it continues to grow freely. It is this drought-resisting quality which renders lucerne such a valuable fodder plant in Queensland and New South Wales, where it is extensively grown for pasture purposes, and for hay, which is largely exported for use in other parts of the Commonwealth.

COST OF WORKING A FARM IN NEW ZEALAND.

When comparing the cost of working a farm in England with one of the same size in New Zealand, several points have to be taken into account, such as the climate, the soil, labour, and machinery. In Australasia wages are higher than in Britain; as a set-off against this, New Zealand can claim, firstly, that there are more fine working-days in the year, the fields are much larger, the latest improvements in labour-saving machinery have been introduced, the soil is more easily worked, and that the genial nature of the climate renders it unnecessary to house stock during the winter months, thus saving the cost of attendance; secondly, that farming operations may be carried on continuously throughout the whole year; and, thirdly, that the paddocks are so large, and usually so level, that the double- and treble-furrow plough may be worked by one man or youth with three horses, thus equalizing the cost of labour, as we have shown that one man, or even a boy, will be quite equal to two men in the Old Country; so that, after all, the difference in the cost of working a farm in New Zealand is not so great as might appear at first sight.

Those farming large areas are already turning their attention to the coming motive power which is destined to take the place of horse-power for ploughing, threshing, and indeed almost every kind of work which is now performed by horses. Trials of agricultural motors have been held in Scotland. Ploughing, harrowing, reaping and binding, and manure-spreaders are worked with great ease and precision. The total cost of working one of these motors is estimated at 18s. per day. The machine complete weighs about 30 cwt., and the speed is from two and a half to six miles an hour. Numbers of these motors have already found their way to Australia and New Zealand. It is probable that this power will ultimately take the place of horses for ploughing and other farm work on the level plain lands, doing it at a greatly reduced cost per acre. Ploughing with electric traction has been tried in California, it is reported, with considerable success. A fully equipped three-horse team costs nearly £200, besides the upkeep in the way of feed; and the risk of accidents and death to the animals.

The hay-crop is simply cut one day, raked into windrows the next, and in a couple more it is ready for stacking.

Wheat is cut and tied by machinery, the stooks requiring no capping. It is frequently threshed out of the stook in favourable seasons, thereby saving the cost of stacking, and thatching; but this method, although very general, is not recommended except in hot dry seasons. The stacks are rarely thatched, except, perhaps, on the weather side. This is a wise precaution, the neglect of which sometimes entails serious loss.

The manure bill, which is such a heavy item of annual expenditure with the British farmer, presses as yet very lightly on the farmers of the Dominion. It is, however, a notable fact that the use of fertilizers has now become more general; 1 cwt. to $1\frac{1}{2}$ cwt. of superphosphate per acre is used with the turnip and other root-crops, for the purpose of forcing the young plant into the rough leaf, when it will be out of one danger—the turnip-fly, or more properly speaking, the turnip-beetle (*Haltica nemorum*), which attacks the seedling leaves. It will therefore be seen that the New Zealand farmer has many advantages over the farmer of the Old Country.

It may also be pointed out that the application of one or two hundredweight per acre of superphosphate of lime produces better results in colonial soils than double the quantity would do in England, showing clearly that the natural richness of colonial soils is not yet exhausted.

IMPROVING OF PASTURES.

Pastoralists are gradually recognising that some attention must be bestowed upon the upkeep of the natural pastures of the Dominion, covering more than 8,000,000 acres which have never been ploughed, embracing the mountains up to the snow-line as well as the downs. Much of these pastures have been denuded of valuable native grasses through the agency of fire, rabbits, and overstocking. The question of regrassing these areas is now under the consideration of the Agricultural Department. The following paper on "Improving pastures," from the pen of "Ovis," bearing directly on the subject may be read with much interest and profit by those interested in the matter:—

The branch of agriculture that has made the least progress during the past twenty years is the cultivation of artificial pastures, and yet the pastures of the country are of the utmost importance. The area devoted to other products or crops is reckoned by hundreds of thousands of acres, while the land under artificial pastures represents millions of acres. Leaving out surface-sown land, most of which is to be found in the North Island, we cannot be said to possess anything which can, properly speaking, be counted as permanent pasture. Paddecks are to be found which have not been ploughed up for a long period, but in these cases the grass is usually of inferior character, slow in growth, and not possessing high feeding value. Unless the soil is of the most fertile quality, inferior grasses begin to make their appearance from the very first year after sowing down, and, in the course of a few seasons, take almost complete possession. During the first year after being laid down the new grass keeps a large quantity of stock, if the season is decently favourable, but from that time forward the value of the pasture steadily diminishes, until, in the course of a few years, it becomes so deteriorated that, taking the year round, it keeps less stock than good tussock pasture. It will, perhaps, not be far out to say that, after the

third year, pasture ceases to be profitable, and especially so when high prices have been paid for the land. There is always a considerable extent of land throughout the country lying more or less idle under old grass. If, during the time it is under old pasture, the soil were occupied in storing up fertility for succeeding crops, there would be something to be said for it, but, although it may be, to some extent, storing up plant-food, it is usually, at the same time, being taken possession of by twitch and other mischievous vegetation, which interferes largely with the working of the land when it is again brought under the plough.

The formation of permanent pastures was a dream largely indulged in some thirty years ago by the owners of large estates. The idea was that once the land was laid down in grass the expenditure would come to an end, and that this relatively small initial outlay would yield perennial returns. It needed but very few years' experience to dissipate these pleasing hopes, and it soon became borne in upon the minds of farmers, large as well as small, that unremitting effort and outlay are the only condition under which the soil will yield anything but the scantiest returns. Land is a most exacting taskmaster. It has been well said that when a man buys a block of land under the impression that he is to be the owner of the land he ultimately makes the discovery that it is the land that owns him. There is much of the land in the Canterbury District that gives a better relative return under crop than under grass. The question, however, arises as to how much this is due to natural conditions of soil and climate and how much to management or mismanagement, as the case may be. We have the advantage of an excellent climate for all-round agricultural purposes. If such were not the case, the country could not show such a high average rate of production that it does, indeed, it may be said that the high average yields obtained are due more to the climate than to any extraordinary natural fertility of soil. But, so far as the Canterbury District is concerned, it can scarcely be said that the climate is in the highest degree favourable for pasture formation. Our occasional excessively dry summers tell heavily on the pastures, and in any season we are liable to spells of parching north-west winds, the effect of which are very much felt. In England, that country of wonderfully green thick sward, anything akin to our north-west winds is unknown, and there is a general humidity in the atmosphere which is so specially favourable to the growth of grass. Under any kind of management we can never hope to rival the English pastures. General humidity of atmosphere seems a condition necessary for the production of a good close sward. When we get a run of wet seasons here it is observed that the pastures always thicken up, but when a dry season sets in the ground between the plants soon begins to make its appearance unless the land is in the possession of twitch grass. Inferior grasses grow dense, and cover the ground completely, but the good grasses have a reverse tendency, and the secret to be discovered is to find the means of inducing the grasses of good feeding value to cover the ground, and to leave no opening for undesirable invaders.

In his book on New Zealand the Hon. W. P. Reeves remarks that the consuming passion of the New Zealand settler is to make grass grow where it did not grow before, or where it did grow before to put better grass in its place. If our farmers are obsessed by the passion for growing grass to the extent attributed to them by our late High Commissioner, it cannot be said that they have succeeded in gratifying that passion to any inordinate degree. They could do with a lot more grass than they have succeeded in growing yet, without being inconvenienced. Farmers depend on the pastures for keeping the bulk of the sheep stock for about three-fourths of the year, and yet they are very chary of spending money on the pastures. To lay the land down to grass in the cheapest manner possible, with the least possible expenditure in seed and labour, is an article of faith with many of them. The use of artificial manures is yearly increasing, but it has not yet been extended to the production of grass to any great extent except in an indirect way. To lay down with a crop of oats is, of course, the cheapest way of doing it, but whether it is the most profitable way of doing it, considering that the grass is expected to last for some years, is

another question. A good plant may be obtained in this way if there is plenty of rain all through the summer, but if the rainfall is scanty the oat crop absorbs most of the moisture available, and the grass, in consequence, gets a miserable start, from which it never recovers. This, of course, applies to land of ordinary quality, and not to exceptionally fertile soil. Oats are surface feeders, and require plenty of moisture, and ryegrass, which makes up the bulk of the seed sown, is of somewhat the same character, and the oat plant, being the more rapid and more vigorous grower, the grass, in consequence, suffers. Except in the coldest districts there are about six months in the year during which grass may be sown. It may be sown with an oat crop, with turnips, or rape, or without any other crop, or with a light seeding of Dun oats to increase the volume of feed. Which of these plans is the best, and at what period of the year it is best to sow it, must depend largely upon circumstances; but, whenever it is sown, or in what way, there is one thing that may be depended upon, and that is that unless the land is in good heart for grass no great results can be expected. Oats, for example, are an exhaustive crop, ryegrass is somewhat of the same nature as a cereal crop, and therefore oats and ryegrass cannot be expected to flourish together unless there is some help given to the grass in the shape of artificial manure.

Leaving exceptional seasons out of consideration, the productiveness as well as the durability of a pasture depend on the plant-food in the soil. Ryegrass, which is and, under the circumstances, must be the chief constituent of our pastures, or, at least, the chief constituent aimed at, is a surface-feeding plant and is also inclined to be a short-lived plant, but if the soil is only rich enough it lasts a long time, and in fact may be considered a perennial. When land is said not to hold grass, it means that the grass dies out because there is not the food in the soil to keep it going. That is the secret of the whole thing, and from this arises the question as to how far it would pay to go to the expenditure of artificial fertilizers in order to supply the deficiency. The cultivable land of the country is pretty rapidly being cut up into small, or relatively small, holdings, and it becomes necessary to break up the grass at not long intervals to keep the rotation going. But it is important that the land should be kept at its fullest productive capacity during the time it is under grass, and not to allow it to be half idle during two or three years. A farmer is naturally very reluctant to break up a paddock while it is still bearing a good sward, but it is only by doing this that he can expect to keep good grass. Land has become too expensive a thing to buy to admit of idleness on the part of either the farmer or the soil. If land, by the application of artificial fertilizers, can be made to grow as much feed in one year as without artificial help it would take two years to produce, which is by no means an impossibility, it is obvious that the result would justify considerable expenditure. And there is also another important consideration. With the land in good heart for grass, the growth is not only larger, but it begins earlier in the season. Let any one compare a patch of grass, which has, perhaps, accidentally been well manured, with the land surrounding it to which no manure has been applied, and the probability is that in the early spring there will be a difference of something like a fortnight in favour of the manured patch. It need scarcely be said that if by any means an earlier growth in the pasture can be induced, it would do much towards bridging over that gap, so injurious to the flock, which frequently intervenes between the time when the turnips are finished and the pastures begin to yield a sufficiency of feed for the lambing ewes. And here comes in the want of more knowledge than we have at present. It may not be too much to say that most farmers are feeling the necessity of more knowledge with regard to manures in relation to pastures; they are, in fact, still waiting an answer to the old question of how to make two blades of grass grow where only one grew before, and the answer can only be found in practical experiment.

LIVE-STOCK.

Cattle: The number of cattle in the Dominion for 1910-11 was 2,020,171, showing a considerable increase, amounting to 246,845.

In the above are included 804,078 cows, dry and in milk, and heifers to calve this season.

Horses: The number of horses in the Dominion returned in April, 1911, were 404,284, showing an increase of 41,025 since 1908.

Sheep: The returns made up to 30th April, 1911, show 23,996,126, a decrease of 273,494. The export of frozen lambs for the year ended 31st March, 1911, was 3,839,922, and the export of frozen sheep for the same period was 2,107,782—a total of 5,947,704; in addition there were 46,009 cwt. of legs and pieces exported.

The total amount of frozen beef exported to 31st March, 1911, was 56,002,464 lb.

The distribution of the flocks of sheep in the Dominion is as follows: In the North Island, 12,814,353; in the South, including Stewart Island, 11,181,773. Grand total: 23,996,126.

SHEEP.

New Zealand is admirably adapted for the breeding of all classes of sheep, from the fine-combing merino to the strongest type of Lincoln. The merino occupies and thrives on the wild lands, from the snow-line to the border of the plains, as well as on the drier portions of the plains. The merino ewe furnishes the foundation for all the crossbred varieties. On the rich moist soils the Lincoln and Romney Marsh sheep flourish, while the finer English and Border Leicesters and Down sheep occupy the drier lands.

Sheep bred from merino ewes and longwool rams, or from crossbred ewes with Down rams, are the most suitable for the frozen-meat trade, and are known as "freezers."

The dapper little Southdown flourishes wherever crossbreds thrive. Their more ponderous cousins, the Shropshire and Hampshire Downs, have their admirers. English Leicesters and Border Leicesters are also much sought after for this purpose, particularly in the South Island, where "prime Canterbury" mutton is produced. The breeds of sheep now in New Zealand are Lincolns, English Leicesters, Border Leicesters, Romney Marsh, Shropshires, Southdown, Hampshire Downs, Merinos, Cheviots, Ryelands, Dorset Horns, Oxford Downs, and Roscommons.

Shearing commences in September, and is continued till January. The usual price per hundred is 20s. Shearing-machines are now used in nearly all the larger sheds. They have not, however, proved an unmixed blessing, for the reason that they clip the fleeces clean to the pelt. The mortality amongst newly shorn sheep is frequently very heavy.

The average clips for the various breeds of sheep are approximately: Merino, from 4 lb. to 7 lb.; quarter-breds, about 6½ lb.; half-breds, 7½ lb.; three-quarter-breds, 8½ lb.; Leicester, 10½ lb.;

Lincoln, 11 lb. Of course, very much larger clips are obtained from special flocks, as much as 25 lb. to 30 lb. per sheep; but the above figures represent general averages.

The staple of New Zealand wool, especially the longwool and cross-bred, is remarkable for its freedom from breaks and other imperfections incidental to countries subject to long droughts and periodical scarcity of feed.

The most profitable sheep for New Zealand is that which combines the best fleece and the most suitable carcase for freezing-purposes, together with early maturity. This is the class of sheep which some sheep-breeders have set themselves to produce. Whether such an animal, having fixity of type, can be evolved, remains to be proved; so much depends on the feed, situation, and soil.

A general flock-book, to embrace the various breeds of pure-bred sheep throughout the Dominion, was established in 1895. Subsequently it was found expedient to publish separate volumes, one for the North Island and one for the South Island, controlled by separate councils.

The North Island published vol. viii in 1909; the South Island published vol. vii, new series, in 1911, as follows:—

			North Island. 1909.	South Island. 1911.
Lincolns	..	..	90 flocks	28 flocks
English Leicesters ..	..	..	35 "	160 "
Border Leicesters ..	..	..	20 "	158 "
Romney Marsh	..	..	"	70 "
Southdowns	..	..	43 flocks	44 "
Shropshire Downs ..	..	..	21 "	58 "
Hampshires	..	..	2 "	..
Merinos	..	..	1 "	22 flocks
Cheviots	..	..	1 "	1 "
Ryelands	..	..	1 "	8 "
Oxford Downs	..	..	..	1 "
Dorset Horns	..	..	..	1 "
South Devon	..	..	1 flock	..
Totals	..	..	215 flocks	551 flocks

Victoria, South Australia, and Tasmania also have flock-books. This is a step in the right direction, as flock-masters in South America and elsewhere demand a certificate to the effect that the cattle and sheep purchased by them are duly registered in an authorized herd or flock book. The value of these books is now so fully recognized that all the distinctive breeds of sheep in Britain and elsewhere have their recognized registers. Carefully kept registers of breeding must ultimately tend to improvement in the quality of the flocks.

The capability of New Zealand for producing mutton has not as yet reached its limit. When the frozen-meat trade was first seriously considered in 1877, an assertion to the effect that 1,000,000

* The Romney Marsh herd-book published in the North Island contains 183 flocks.

sheep per annum could be found for freezing without impairing the breeding-flocks was treated as highly chimerical by sheep-breeders of long experience. Subsequent events, however, have proved how immeasurably under-estimated was the carrying-capacity of the runs and farms of the Dominion. There are now twenty-two freezing-works in operation in New Zealand. But it must be borne in mind that Argentina and Australia also share the trade of Great Britain with New Zealand. It must be admitted that, with cheaper land and a closer proximity to the markets of the world, Argentina has become a very formidable rival to Australasia. The only way to keep command of the market is to ship nothing but first-quality graded mutton and lamb. This system is carefully carried out, and has been found to be beneficial to the trade.

HORSE-BREEDING.

The climate of New Zealand is admirably adapted for the breeding and rearing of horses of all kinds, especially draught horses. Indeed it would be difficult to find better Clydesdales than those bred on the limestone soils of Oamaru, Canterbury, and elsewhere. Some of the best blue-blood of this breed has from time to time been imported from Scotland, with the result that the breed is now well established. The Shire horse has his admirers also; some fine specimens of the breed have been imported from time to time.

Professor Lowrie, Director of Agriculture, South Australia, in a recent report furnished to his Government on the necessity of improving the draught-horse stock of the State, pays a high tribute to the horses of this Dominion by recommending that draught sires of high quality should be introduced from Scotland or from New Zealand, with a view to improving the horses of South Australia.

The light-horse stock has risen into note through the production of animals which have rendered themselves famous on the turf. The demand for horses suitable for remounts for the cavalry service in India is a continuous one, affording a ready market for the proper stamp of animal; shipments are periodically made to that country with varying results.

With a view to bringing the use of pure-bred sires within the reach of small selectors in the outlying blocks, the Government have imported a few first-class horses of the most approved types, which cannot fail to have a beneficial effect on the stock of the country. The Canterbury Agricultural and Pastoral Association publish a Draught-horse Stud-book, which is largely used by breeders of that class of horse. The registered animals up to date, 1911, embrace 1,181 stallions and 2,978 mares.

CATTLE.

New Zealand possesses all the best strains of blood, and this is evidenced by the superior class of cattle to be met with

throughout the settled districts, especially in the show-yards. There are now four herd-books published—viz., the “Shorthorn,” published in 1911, vol. ix (contains 147 bulls and 261 cows); the “Aberdeen-Angus Cattle,” vol. viii, 1911 (contains 97 bulls and 162 cows); the “Hereford Herd-book,” published by the Hereford Breeders’ Association; and the “Jersey Herd-book,” published in Palmerston North. The value of properly kept herd-books is now fully recognized. Purchasers of animals for export or otherwise now demand that they shall be duly registered in some authorized herd-book as a guarantee of pure breed. New Zealand is comparatively free from many of the diseases so disastrous to horned stock in other countries. With a view to maintaining this enviable position, the Government has prohibited vessels carrying live-stock from infected countries touching at any of the ports of New Zealand except under certain conditions.

DAIRY STOCK.

The breeding of first-class dairy stock offers a field for profitable investment owing to the increasing development of the dairy industry. There are now over half a million of cows kept exclusively for dairy purposes. The rearing of well-bred heifer calves is sadly neglected by many dairy-farmers, for the reason that the consumption of the separated milk by pigs gives a much quicker return. Nevertheless every dairy-farmer should rear a few of the best heifer calves from the best milkers got by a good strain of sire. Separated milk, although relieved of its butter-fat, loses little of its feeding value; the addition of a little linseed meal will restore the fatty constituents, which, however, are not the most valuable for feeding purposes. Ground oats, wheat, or barley added to the linseed mucilage will tend greatly to the rapid growth of the calves. An acre or so of European flax should be grown upon every farm where stock-rearing is carried on. Much has still to be done in the way of improving dairy stock. The yield of milk from fairly good milking-cattle is approximately 500 gal. per annum, although from 700 gal. to 900 gal. per head are frequently obtained from selected herds. The average quantity of milk obtained will no doubt be increased as more attention is paid to breeding and proper feeding. The general management and feeding of dairy stock is a question demanding every attention. Kind treatment is essential to success; clean pastures, clear running water, and grasses of the best quality are all factors fully recognized wherever dairying is successfully carried out; and, last but not least, warmth and shelter during the cold wet months of winter.

The average yield of butter from milk passed through the separator is 1 lb. for every $2\frac{1}{2}$ gal. of milk of $10\frac{1}{2}$ lb.; so that the average cow produces annually 200 lb. of butter, or 500 lb. of cheese, which, estimated at $4\frac{1}{2}$ d. per pound, will be worth about as much as the butter.

The following is a paper from the pen of Professor R. E. Alexander, of Lincoln College:—

The importance of the dairying-industry to New Zealand can be seen at once on an investigation of the annual export returns. The popularity of dairy-produce as an article of diet, the stability of the market, and favourable climate-conditions present, all tend to make the industry expand still further. The mild climate gives the New Zealander an advantage, by dispensing with housing and hand-feeding, besides giving him a larger yield of butter-fat. These factors go a long way in compensating him for the distance from the markets. The tendency to cut up the richer lands into small holdings will act as a further stimulus to the industry, because there can be no doubt that if properly carried out dairying gives a much larger return per acre than other branches of farming.

Dairying, as carried on in other countries, generally goes hand in hand with cattle and pig raising; in fact, as in many other industries, the subsidiary products are looked to for the profit. I am aware that most suppliers to factories feed separated milk to pigs, and so turn it into pork, but very few seem to go in for systematic calf-raising. Some dairymen reckon their income from the value of the butter-fat alone. This appears to me to be ridiculous. Milk is a complete food; the separator only removes the fat from it, and an equivalent amount of some other digestible fat can be returned to the separated milk, making it a complete food as before. Surely this milk is not a negligible quantity to a dairy-farmer—not a drop of it should be lost, but should be turned into calf or pig. Pig-raising is an established subsidiary industry to dairying, and its value has been recognized. Why should calf-raising not pay also? It has been argued that the prices obtained for calves would not pay for the trouble of raising them. But why are there such poor prices? Two reasons seem apparent to me. Calves cannot be expected to thrive on separated milk alone, and from what I have seen the bulk of the stores offering are of such a non-descript character that they are worth very little—of course, so long as dairy-farmers pay no attention to the proper mating and quality of their animals, the calves from such animals are bound to be worth very little. The steers are no good to the graziers if they cannot be fattened, and unless the heifers have some breeding or promise, they will not be bought to run for cows. At present there seems to be no definite conclusions as to the best type of dairy cow, or the best system of breeding. There are popular crazes and fads with regard to different breeds, and the value of each for crossing with a dairy herd, but when all these have subsided, as popular crazes do, something useful will have to be done.

In New Zealand there are several questions to be considered in regard to cattle. To begin with, cattle land can be split into two portions: (1) land which, either by its situation or nearness to a market, is suitable for dairying; (2) land which, by reason of its situation or distance from a market, can only be used for beef-raising. Owners of either class of land should play into one another's hands, and by so doing both parties will reap advantages. The dairy-farmer, as a rule, wants an outlet for his young stock, which he can only afford to bring to a certain stage. He also wants fresh cows from time to time. On the other hand, the grazier would prefer buying stores to raising them, and the heifers would pay him better to bring out as springers, but in both cases the animals must be suitable. The dairyman must sell steers that can be fattened, and the grazier must sell cows that will produce milk. Again, dairy farms might be divided into two or three classes; first, we have the self-contained dairy farm, which is large enough to support its own young stock and provide for renewals. On this class of farm the owner's particular fancy must be allowed full sway, as he is independent of outside influence or help. Then we have smaller farms which are not self-contained, and they might be divided into two classes—(1) those owned by farmers whose only idea is to get butter-fat from the cows, and probably turn a little of the separated milk into pork; calves are sold for the price of

the skin, and the open market chanced for renewals: (2) those owned by farmers, who also make an effort to rear enough females to renew their herd from time to time. This means that only 60 per cent. of the total stock kept are milk-cows, and on a very small farm seriously handicaps the owner. In either of the latter cases the farmer wants to be protected against himself. The class of stock kept should be such that when the calves are weaned they will sell readily to graziers, and so leave a return for separated milk. But the dairy-farmer says he is independent of the graziers, and does not want to provide him with stores, then he wonders why he cannot buy milk-cows when he wants them. The grazier, on the other hand, says his only object is to produce beef, and he has no interest in producing milk-cows. In my opinion both men are wrong. As I pointed out before, they should play into one another's hands to their mutual advantage. This can be accomplished by cultivating a general-purpose type of animals. Many of our authorities nowadays argue that no one type of animals will suit New Zealand requirements, that we must specialize and produce a particular animal for a particular purpose—i.e., single-purpose animals. I must say I cannot agree with this opinion. Single-purpose animals are only for the few. The single-purpose or family cow is useful in her place, but in any country where beef-raising is an important factor the general-purpose animal must rule. In the same way the beef-cattle, which are useful on large ranches and isolated areas, must give way to the general-purpose animal in more thickly populated districts and where the farms are smaller.

Just let us for a moment look at the practices in other countries. We will first consider those countries where the single-purpose dairy cow is kept. Of these, Denmark, as one of our chief competitors in the butter market, is most prominently before us. What are the facts in Denmark, where the dairy cow is brought to so-called perfection? A casual glance at the country would be sufficient to convince even the most sceptical that beef-raising in Denmark would be a very uphill task, and could not be undertaken by the small farmers. As it is the Danes require to farm intensely to keep their cows going, so that the single-purpose cow of Denmark is the outcome of circumstances, and the circumstances which prevail in this country are altogether different from those prevailing in that country, where practically every acre can be farmed, while here many cattle-tracks are accessible only to the cattle and musterers. Again, I might be told single-purpose cows are used in Great Britain, which is also a beef-raising country. Undoubtedly this is true, but if an inquiry be made into the prevailing practice where these cattle are kept, it will be found that there is a method in the madness, which makes all the difference. In Ayrshire, for instance, where the Ayrshire is largely kept, a very common practice among suppliers of milk to Glasgow, and even among cheesemakers, is to enter into a contract for the sale of calves into the beef-raising districts, but on certain conditions, the chief of which is that the cows must be mated with a pure-bred bull of a type stipulated and the bull approved. As a rule, the Shorthorn cross is the cross stipulated. A well-known sale of white Shorthorn bulls is held in Carlisle every year, all of which go to cross with Ayrshire cows. The steers from this cross fatten well, and the heifers, as a rule, are kept for cows, and sold back to the dairying districts, so that both classes of farmers are benefiting by the arrangement. The common practice is for the dairy-farmer to rear the calves, selling them as stores at six to twelve months old. The returns from these sales being reckoned largely as profit.

The bulk of the cattle kept in Great Britain are what may be termed general-purpose animals. It is from this type that the bulk of the dairy cows are drawn, and the steers are fattened and turned into beef at the end of the milking-period. The cattle are in the hands of no one class of farmers, but they are everybody's cattle, and every farmer benefits by the arrangements. The dairyman can always secure a cow, and the grazier and stall-feeder are always sure of stores to fatten. Again, in some countries beef-raising is the only object, but the conditions are unsuitable for dairying, or the industry has not been recognized, so that a comparison with New Zealand cannot hold.

Every country has evolved a type of animals suitable to the conditions and requirements. Why should the same thing not be done in New Zealand? From what I have seen, the conditions here are more nearly comparable to those of Great Britain than any other country. The production of butter holds an important position, but why should New Zealand not produce first-class beef? The natural advantages are so great if only the proper type of animal were produced. It is quite possible that a certain quantity of first-class beef is produced, but the bulk of it is not even second, as the London market reports will show. This is not as it should be. The average dairyman will say, "What has this got to do with me? I do not care about the beef trade. I am only interested in butter." But in this he is wrong, and is only throwing sand in his own eyes. If New Zealand is to increase her wealth there must be co-ordination and co-operation among all classes, and farmers especially. No farmer or class of farmers can afford to be independent. We want a type of cattle suited to the general trade of the country. One that will give a constant supply of milk-cows on the one hand, and give beef-animals that can be classed as prime on the other. From this type the dairyman will have a larger income by turning his separated milk to profit in his stores as well as selling his butter-fat, and the beef-raisers will get better prices for the beef produced from the stores. It is claimed, and not without reason, that this type of animal is hardier and has more stamina, and is therefore better suited to the general conditions under which cows are kept than the smaller less hardy breeds that have been evolved under conditions totally different to those found in New Zealand.

It might be asked, Where are these general-purpose animals to be got? The answer is apparent. There is a limited number of these animals to be met with everywhere. With these as a foundation, and a proper system of breeding put into practice, the numbers will soon increase. Surely the same enterprize and perseverance can be brought to bear on cattle-breeding that has been at work evolving our dual-purpose sheep. And since it has been found to be possible to produce a sheep which will give a good fleece and a good carcase, there is no reason why dual-purpose cattle should not be the prevailing type. In conclusion, I might add that the results of the milking-competitions at the leading English shows during the past season have clearly proved that the general-purpose cow, bred on right lines, is the best all-round dairy cow.

THE DAIRY INDUSTRY.

This industry continues to flourish throughout New Zealand. The Government spends large sums of money in teaching the art of butter and cheese making, the proper method of grading, packing, and shipping. With a view to encourage the breeding of better strains of cattle for the production of milk of superior quality as well as quantity, the Government, recognizing the importance of this matter, have imported a few first-class sires from well-known breeders of milking strains of cattle for the use of those dairy-farmers who are not in a position to secure the best bulls for their purpose. The service of these bulls has been fixed at a nominal scale, and is only available for selected animals. The Canterbury Agricultural and Pastoral Association have for many years been publishing records of pedigree Shorthorn, Polled Angus, Ayrshire, and Holstein. A Hereford and a Jersey herd-book are published in the North Island. Graders are employed examining all butter and cheese for export, and brand each packet with its proper quality. Factory-owners fully recognize that it is folly to pay freight on any but the best quality; and this remark

applies to grain and meat as well. New Zealand has to compete against Canada, the United States, Denmark, Australia, the Argentine, and Siberia. Dairymen must therefore endeavour to raise dairy cattle which will yield the maximum of milk of the best quality; in fact, nothing but intense farming will pay in the future, applied to every branch. To produce milk of the best quality for the manufacture of butter or cheese during the winter and early spring months is a very difficult matter, especially when turnips are largely used. The practice of grazing milking-cattle on "breaks" of turnips is discouraged, but if this feed must be used, the roots should be carted on to clean grass land, and fed immediately after milking with plenty of clean sweet hay or straw intervening. Ensilage is strongly recommended as a substitute for turnips, and is used by many dairy-farmers in the North Island. A well-known Australian authority, writing in the *Pastoralists' Review*, says, "Ensilage for years past has been fully recognized as pre-eminently a food for the cow in milk, but to be of much feeding-value a great deal depends on the herbage and grasses, and care used in its manufacture." This is an important point. Many farmers in Otago Central also use large quantities of this kind of fodder with great success.

The complete sterilizing of milk to destroy the germs of disease is a wise precaution. The operation consists of heating milk up to a certain temperature, and cooling it rapidly, a process which has been found to destroy the bacillus of tuberculosis known to be present in the milk of affected cattle. The Government veterinaries are employed examining the cattle, and a large number are annually tested with tuberculin, and when found affected they are destroyed, compensation being allowed.

The Chairman of the Bank of New Zealand, in his annual address to the shareholders, June, 1910, referring to the unprecedented advance in the value of dairy lands, said:—

It has suggested itself to me that some authentic details of what is possible under modern conditions of scientific farming and with the use of the latest dairy machinery would be of interest to you. The best results obtainable in New Zealand, of which reliable information is available, is the annual return of, approximately, £11 per acre. This has been achieved on the Waimate Plains, near Manaia, on a 32-acre farm with twenty-four cows, the actual returns from which, for milk alone, were £360. If from this two-fifths be deducted as the cost of labour, there is a net result to the landowner of £216, equal to £6 15s. per acre, or £9 per cow. This splendid result is the exception rather than the rule, for the total return from cows kept for dairying in the Dominion (536,316) only amounts to, say, £4,030,000, made up thus—

Butter exported for year ended 31st March, 1910 ..	£1,634,864
Cheese	1,185,704
Milk, butter, and cheese for local consumption, say	1,257,927
Or a total of	<u>£4,078,495</u>

If from this an average of two-fifths be deducted, the net result is, approximately, £2,448,000, or about £4 10s. per cow, or just about one-half of the best results which I have mentioned. But we cannot take it on the favourable basis of £9 per cow, for a recent investigation has shown that a large percentage of the dairy cows of the Dominion do not average a gross return of £8. Indeed, it is on record that some large herds have given a gross yield of less than £4 per cow. There is a wide margin of difference between the extremes, and it is quite obvious that there is great scope for the scientific expansion of the industry. It is a question, therefore, whether the time has not arrived for the Government to take an active part in a wholesale way in the matter of herd-testing. A beginning has already been made, which appears to justify Government intervention, and with proper safeguards there seems no reason why herd-testing should not be carried out on an extensive and comprehensive scale. The milking-machine and the low rate of interest at which money can be borrowed from the Advances to Settlers Department have also been factors in enhancing the price of dairy land. The rise in the prices of our dairy products is, of course, mainly responsible for the higher land values in dairying districts.

PIGS.

These useful adjuncts to the dairy now hold an important position on all dairy farms. The favourite breed in New Zealand is the improved Berkshire. The large and small breeds of White Yorkshire are also to be met with, but are not so generally approved of as the black pigs. The Tamworth has its admirers amongst pig-breeders, as it answers admirably for crossing with black pigs. It produces a good bacon pig, making more lean meat and longer sides than the pure Berkshires, but takes a much longer time in coming to maturity, which renders the breed less sought after than it otherwise might be. Pigs require no better attention than a good grass paddock, with a liberal supply of roots, and a little unthreshed pea-haulm for a few weeks before killing, with plenty of water, and shelter from the sun during the warmest summer months, and in winter as well.

The breeding, rearing, and fattening of pigs is a source of wealth which is capable of considerable expansion. Several plants for the mild curing of bacon have been set up at the various freezing-factories, and by private persons and firms. The establishment of properly appointed pig-farms is a somewhat costly undertaking, as all the fences must be pig-proof. Doubtless this consideration has had a deterrent effect upon some, while others find the rearing of young stock for the dairy and the breeding of lambs a sufficiently profitable undertaking, besides causing less trouble, but there is room for an enormous extension of the industry.

POULTRY.

The efforts being made by the Government to foster this industry are gradually producing the hoped-for results. The distribution of a better class of poultry is showing good results already. Farmers are beginning to see that their poultry-yard should form no mean auxiliary to the general return from the products of the farm. With such a climate as we have, there need be no difficulty in raising hundreds where dozens are now produced. The Agricultural Department has done much to foster poultry-farming.

THE FRUIT INDUSTRY.

From the North Cape to the Bluff Hill, in the extreme south of the South Island, the climate and soil are, for the most part, well adapted for the growth of a large variety of fruits. Generally speaking, apples, pears, plums, quinces, apricots, figs, walnuts, cherries, gooseberries, currants, strawberries, and raspberries grow luxuriantly, producing abundant crops of fruit. In the Auckland District, oranges, lemons, and limes, grow in favourable localities. The olive thrives in certain districts of the North Island, bearing satisfactory crops, and the manufacture of oil should assume important dimensions at no distant date.

Vine-growing is also carried on with tolerable success in many districts; tons of fruit grown under glass are sold in the Auckland markets annually. Signor Bragato, an Italian wine expert, has given it as his opinion that there are numerous localities in both Islands suited for growing vines for the manufacture of wine.

Away in the far north the banana grows and ripens its fruit, but it is not thought that it will ever enter into successful competition with those grown and imported at so cheap a rate from the Pacific Islands.

Extensive orchards of apples have existed in Auckland for many years, and are still capable of producing an abundance of fruit, if kept free from codlin-moth and other pests. Orchard-planting is progressing, and will very soon become an important industry. The fruit farms of Hastings (Hawke's Bay) are important centres of successful fruit-growing, including grapes for wine-making. Central Otago will become a large fruit-producing district, being free from violent and scorching north-west winds, so soon as that district is connected by rail with the sea-ports. The success which attended a recent shipment of apples has given an impetus to apple-planting in Nelson. The price received warrants the assumption that the industry is fairly established, and that Nelson will ere long take its place as a large and successful exporter of apples, and probably other fruits, to the Home markets.

With a view to extending the growth of apples and bringing the industry within the reach of any industrious man and his family who may show an aptitude for fruit-farming, the Government have established farms varying from 21 to 48 acres at Waerenga. Each farm is planted with the very best apples, &c., suitable for export. The farms are open for sale or selection in terms of Part III of the Land Act, 1908, and the Fruit-farms Settlements Act, 1910, and the regulations under the last-named Act, either for cash, for occupation with right of purchase, or for renewable lease, at the option of the applicant. Attached to each orchard there are several acres in grass to provide a site for a home and grazing-space for a horse and cow; and, further, the settler may obtain an advance of money for buildings up to £150. It may be anticipated that these farms will be eagerly sought after, and with their settlement the rapid development of the fruit industry must follow.

The manufacture of cider has assumed considerable dimensions, opening up a market for suitable surplus fruit. The New-Zealand-made article is rapidly coming into favour with the general public.

The drying of fruit has been fostered by the authorities, who sent an expert through some of the apple-growing districts, giving practical lessons in the art of artificial fruit-drying. A great deal more might also be done in bottling fruits, and the manufacture of fruit-wine, if only for home consumption. The manufacture of jam is successfully carried on; there is, however, plenty of room for further developments in these directions.

PROSPECTS OF SMALL FARMERS.

Owing to the humid climate and fertile soil New Zealand is peculiarly well adapted for small holdings. Men of slender means can now make homes for themselves and their families, always provided they know something of the work they undertake, and are, with their families, willing to work hard and live frugally for a few years. It is quite possible for a man with a few cows and pigs, together with poultry and bees, to make a good living, as markets for these products are available in England and elsewhere; there is also a good local market, if the goods are properly prepared, and a continuous demand for the supply of coastal and ocean-going steamers. The facilities now given for obtaining land and money at reasonable rates offer great inducements to persons to settle upon the land. This is amply illustrated at Cheviot and elsewhere, where fine estates have been cut up into moderate-sized farms, and let to farmers on long lease at a rental representing $\frac{1}{4}$ per cent. on the purchase-money. Prosperous homes have sprung up, and tree-planting is being carried on by many of the settlers, which is an earnest of the stability of any settlement.

STATE AFFORESTATION IN NEW ZEALAND.

[By WILLIAM C. KENSINGTON, I.S.O., Under-Secretary of Lands.]

REASONS FOR AFFORESTATION.

CONSIDERING the apparently vast extent of our indigenous forests, the fine quality of our principal timbers, and their varied usefulness, it has often been the subject of much comment that it is considered necessary by the Government of this Dominion to inaugurate a policy of reafforestation. It can, however, readily be understood that the full facts of the case must be known and comprehended before it is possible to demonstrate clearly and cogently the reasons that have actuated the Government in the past and at the present time.

In the report on "Forestry in New Zealand," published in 1909, statistics were given showing in detail the present estimated supply of timber from all classes of native trees, and the probable demand for timber in the future, and the conclusions then arrived at apply with even greater force at the present day. Before recapitulating them, however, it is desirable to explain briefly the nature of our indigenous trees, and their various drawbacks and good qualities.

New Zealand possesses a large variety of trees in its native forests, there being no less than eighty-six different species known to botanists. The majority of these are, unfortunately, useless for commercial purposes to any great extent, through various causes, and, as a matter of fact, the following trees are practically the staple supply of the timber trade.

Kauri (Agathis australis).—Grows only in the Auckland District. The girth of marketable trees ranges from 4 ft. to 30 ft., and sometimes more, the general average being about 12 ft., and the contents about 3,000 ft. There is no pine in the world superior for all-round use. It is used for joinery, furniture-making, house-building, ship, yacht, and boat building, wharves, bridges, railway, and other works, but is well adapted for high-class joinery, and internal fittings, carvings, &c. When converted into veneers it is highly prized. Unfortunately, it takes from six hundred to three thousand six hundred years to attain its full size, and as it is very inflammable, its growth and preservation is a matter of considerable difficulty.

Totara.—Totara is found throughout the whole of New Zealand except in the Nelson District, though the bulk of the supply is in Wellington, Auckland, Hawke's Bay, and Westland. It is very durable, and of all New Zealand timbers is the best for resisting the ravages of the teredo, and consequently has been largely used in the construction of wharves, bridges, &c. It also lasts well in contact with the ground, and is utilized largely for general building and joinery purposes, telegraph-posts, railway-sleepers, fencing-posts, &c. The mottled variety is much sought after for panels, furniture, inlaying, &c. Its chief drawback is that it is somewhat brittle, but it is probably the best timber for general building purposes in the Dominion.

Rimu, or Red-pine.—This is the principal timber in the New Zealand forests, and is extensively used for building, joinery, &c. The figured variety is often beautifully grained, and is much in demand for furniture. It is a most valuable wood, owing to its wide adaptability and comparative cheapness. Though not equal to totara or kauri, yet, owing to its greater cheapness, it is more largely used.

Kahikatea, or White-pine.—This timber is also in great demand throughout the whole of the Dominion. It is found chiefly on low-lying or swampy land, and grows in all parts of the Dominion. Its lasting qualities vary, but, unfortunately, the dry rot and borer

find it comparatively easy prey, and therefore it is not much used for general building purposes. Its greatest use is for making butter-boxes, for which purpose no substitute has yet been found. and large quantities are exported to Australia for this purpose.

Matai.—The next timber in importance is matai, or black-pine, which is a very heavy but short-grained timber. It is used for building purposes, and especially for weatherboards and flooring; also for small bridges and fencing purposes. It is second only to totara for durability, but is inclined to brittleness. It is found all over the Dominion in fairly large quantities.

The only other timbers in New Zealand which are used to any extent for general purposes are,—

Puriri, a very hard and tough wood, which makes good sleepers and posts, and is very durable. It is largely used for railway-works, bridge-stringers, and truck-frames. In weight, colour, and texture it somewhat resembles rosewood, but the figured varieties are marked like walnut. It is also largely used as veneers.

Rata, which is mostly used for firewood, is a hard, heavy, tough and very strong wood, mostly straight-grained, and used to a limited extent by wheelwrights, and as arms for telegraph-posts.

The various "*Birches*" (or "*Beeches*," as they should be designated), which grow plentifully all over the Dominion, and are being used for railway-sleepers very extensively in the Wellington District, *fagus fusca* having also been exported to Australia from the Westland and Southland Districts.

The other trees are used to such a limited extent, and chiefly for limited local requirements, that they do not meet the growing demand for superior timbers.

The peculiar characteristics of these trees must be carefully taken into account when considering the possibility of relying on their perpetuation, whether by way of natural regeneration or systematic reforestation. First and foremost is the great drawback that all the indigenous trees suitable for conversion into marketable timber require such an inordinate length of time to grow and arrive at maturity; although, owing to the comparatively recent settlement of New Zealand by Europeans, it is impossible to arrive with absolute accuracy at the exact length of time required by each tree to mature under average conditions, the approximate times previously given are as nearly correct as it is practicable to insure. Secondly, in consequence of nearly all our native trees being surface-rooters, their adaptation for general afforestation in open lands is practically prohibited through the damaging effects of exposure to sun and wind. Thirdly, most of these trees require special treatment to be raised with success, and need considerable shade from the seedling to the adult stage, which can only be afforded by planting them amongst partially cleared forest land, where the natural undergrowth provides the requisite amount of protection. In such a case the annual clearing of undergrowth tending to sup-

press the tree-plants would be of such an exhaustive and expensive character as to prohibit the economical growth of native tree-plants. Fourthly, the principal exotic trees suited for commercial purposes take from one-fourth to one-tenth the time to attain maturity that the local product does, so that it is possible to raise on an average from three to five crops of larch or pine during the same time that it would take to raise one crop of totara or rimu.

Under these circumstances it has been generally recognized that it is out of the question to attempt to renew the indigenous trees for future commercial purposes, except to a very limited extent, and all that can be done is to conserve the remaining supply as far as practicable so as to allow sawmilling to proceed under conditions that will insure the greatest possible use being made of the existing timber. The timber-cutting and forest regulations for years past have been devised with the utmost care to accomplish this result, and, considering the remarkable increase that has taken place of late years in the timber industry, no adverse criticism can justly charge the administration of our native forests with any undue locking-up of natural resources. To assist the progress of settlement it has been imperative that every facility should be afforded the building and allied trades to obtain cheap and accessible timber, and as the periodical fires, that it has been impossible to prevent, continually ravage the portions of the forests nearest to settlement, it has been a wise policy to permit as much marketable timber to be used as was needed by the farming community and the building trades, and so serve a twofold purpose—viz., the gradual clearing of forest country adapted for settlement and its opening for occupation and farming, and the development of the building and constructive trades to cope with the increasing demand that a growing population constantly makes upon their resources.

Moreover, it must not be overlooked that some of the most fertile and productive soil and country in the Dominion was to be found in those very forests that contained the most valuable timber. The vanished Seventy-mile (or Forty-mile) bush, in the southern part of Hawke's Bay, and extending to and around Pahiataua and Eketahuna; the Awarua Forest, between Taihape and Mangaweka; and the numerous stretches of forest in the Auckland District all at one time stretched across and occupied mile upon mile of country that now supports a large and thriving population; and it would have been as useless and as difficult a matter to preserve these magnificent forests in their entirety, whether for aesthetic, sentimental, climatic, or commercial reasons, as it would have been to have prohibited the spread of settlement and the onward march of civilization.

But the Government, whilst permitting the gradual conversion of these forests, has never lost sight of the fact that it was necessary to maintain the timber-supply of the country, and to provide for its needs in the future. One of the earlier methods of inducing the planting of suitable trees was by means of "land grants"—a

settler being given a free grant of Crown land if he planted a certain portion of his freehold land in suitable trees. This system was chiefly confined to the Canterbury District, though it was partially adopted in the Auckland and other districts, but only to a very limited extent. In Canterbury, where the system came into force in the early seventies, as much as 2 acres of Crown lands for 1 acre put down in plantation was sometimes granted, and every inducement was offered to the settlers to put down part of their farms in plantations. Several large plantations may now be seen in North Canterbury that were established by means of this method. As, however, it did not meet the growing needs of the country, the system was discontinued, and it came to pass that the methods of State afforestation that had proved so successful in older countries eventually came to be adopted in New Zealand.

DEMAND FOR TIMBER.

In common with every manufacturing country in the world, the steady increase in demand for timber for commercial purposes has been experienced in New Zealand, and the following table shows how the timber industry has grown :—

Year.	Number of Mills.	Hands employed.	Output for Year.	Cutting-capacity per Annum.
			Sup. ft.	Sup. ft.
1886..	220	3,890	163,740,546	..
1895..	299	4,055	191,053,466	..
1900..	334	6,085	261,583,518	..
1905..	414	6,912	413,289,742	704,930,600
1907..	411	7,139	432,031,611	718,940,000
1909..	423	7,414	413,868,919	755,465,480

To cope with the present demand taxes all the resources of the Dominion, as the supply of our indigenous forests is rapidly diminishing, as will be seen by the following estimates :—

Year.	Estimated amount of Milling-timber remaining in our Forests.
1905	41,723,574,800 sup. ft.
1907	35,785,873,467 "
1909	33,060,883,437 "

Judging from the vast quantity of forest that was not likely to be available for sawmilling, either through unsuitability of timber, difficulty of access, or cost of cutting and transport, and taking into consideration the loss annually experienced through accidental fires, and the fact that a large part of the timber stands on Native and private land which may be required for settlement purposes, thereby necessitating the felling and destruction of the timber, it was estimated in 1909 that the indigenous forests of New Zealand will not cope with the full demand for sawn timber for a longer period than from thirty-five to forty years, bearing in mind the

fact that a certain amount of foreign timber will be arriving continually so as to ease the strain on local resources. Under these circumstances it will be understood why the Government deemed it advisable, many years ago, to inaugurate a system of tree-planting that would gradually take the place of the native forests and timber-supply.

INAUGURATION OF AFFORESTATION.

The problem before the Government was faced in a systematic and comprehensive manner. Three experimental plantations of various trees, aggregating about 15 acres, were started on the Kaingaroa Plains, between Taupo and Rotorua. Another plantation of 15 acres was started at Tarukenga, on the Rotorua Railway-line, and another of 6 acres at Mamaku, not far away. These latter plantations were for the purpose of providing timber for railway requirements. Part of the Rotorua Town Belt was also planted.

Encouraged by the success of these preliminary experiments, a Forestry Branch of the Department of Lands was started in 1896, and three nurseries established—two at Tapanui and Eweburn in the Otago District of the South Island, and the other at Whakarewarewa, near Rotorua, in the North Island. The idea was conceived that, coincident with railway-extension, one or two central nurseries in each Island were sufficient for the growth of tree-plants, which could be distributed at various places in the district, according as circumstances warranted the extension of the system. Later on another nursery was formed at Hanmer, in the Canterbury District (South Island), and attempts were also made to establish nurseries at Starborough, in the Marlborough District (South Island), and Ruatangata, near Whangarei (North Island), but from various causes these latter two nurseries, with the plantations attached to them, were not altogether a success, and have been discontinued.

It must not be overlooked that New Zealand was the first antipodean country to face the problem of State afforestation, and that it was only by means of continuous experiments and the greatest care and forethought that the Department was able to advance on satisfactory lines with due regard to economy and efficiency. It was inevitable that some out of the many species of trees planted should not have proved so great a success as others, whilst the rapid expansion of domestic trades and industries has demonstrated the inadequacy of the original operations, and induced the Government to enlarge its annual provision for the continued extension of plantations to a scale more commensurate with the exigencies of the case.

It must also be distinctly explained that if the present operations do not, in the opinion of some persons, represent that degree of magnitude that are deemed necessary in order to satisfy the whole of the future demand for timber in New Zealand, there are good and sufficient reasons for proceeding cautiously in the meantime. Although the foreign supply is more or less an unknown quantity.

yet it is practically certain that the supply of eucalyptus from Australia and pine from Siberia, Manchuria, and possibly Korea, together with the Douglas fir from Western Canada, will for generations to come satisfy to a very large extent the continuous demand for sawn timber in New Zealand, and that the remaining forests of the Dominion will also be available for some considerable time to assist in supplying the requirements of the commercial community. Moreover, it is essential that the characteristics of exotic trees planted in the State plantations, and their growth and progress in the climate and soil of this country as compared with their growth elsewhere, together with their respective liability to or immunity from disease, shall be thoroughly studied and ascertained (and this cannot be done in a few years), before the inhabitants of the Dominion are committed to such a large increase in expenditure as would be necessary to insure the future maintenance of the timber-supply from New Zealand sources. Hitherto the operations of the Forestry Branch have been more successful than was anticipated at the commencement of the project, but the losses that have been experienced have been quite large enough to convince the authorities that it is the best policy to proceed with due caution, and not to suddenly enlarge the operations, but rather to expand them very gradually after repeated experiments and results have proved the advisability of doing so under certain conditions.

It will be interesting to trace the evolution of the present system from the conditions that appeared to the Government to dominate the position at the time the afforestation policy was decided upon in 1896. They may be said to include,—

(1.) The recognition of the principle that land suitable for settlement should not be interfered with for the purposes of tree-planting.

(2.) The desirability of utilizing Crown land as far as practicable.

(3.) The selection of localities for the plantations which would be fairly accessible from existing lines of railway, and which would, in the future, be conveniently situated to the probable trade centres.

(4.) The selection of areas of open land that were not in proximity to standing forests, but the climatic conditions of which appeared suitable for tree-growing operations, and whose soil seemed sufficiently good for the purpose.

Owing to the varied nature of the climate, soil, and conditions in different parts of New Zealand, and the necessity of the officer in charge of operations being thoroughly acquainted with local conditions, it was not deemed advisable to engage a foreign expert to superintend operations, but the services of a young and enthusiastic New Zealand nurseryman were engaged at the commencement of the work, and the results that were achieved under his advice from the very start were a convincing proof of the wisdom of the course adopted. A careful and continuous study of the latest publications and methods in vogue on the Continent and elsewhere has been the practice laid down for the guidance of all officers of the Forestry

Branch, and as the work of tree-planting in this Dominion becomes more and more important and extensive it is probable that further steps will be taken by the Government to keep the branch in touch with foreign systems and methods.

The late Mr. Henry Matthews was the officer whose appointment as Chief Forester inaugurated the formation of the Forestry Branch, and from 1896 to his unexpected death in 1909 he had the sole technical control of the tree-planting operations, and to him must therefore belong much of the credit or otherwise of the planting accomplished during this period. Since his death the technical direction of affairs has been intrusted to two Superintending Nurserymen, one who resides at Whakarewarewa, and supervises operations in the North Island, and the other who resides at Tapanui, and controls all the South Island operations. These two officers keep a careful watch over the several nurseries and plantations under their control, and are responsible for the rearing and planting-out of all the tree-plants in each Island. In charge of each State nursery is a Nurseryman, and in charge of each State plantation is a Forester. These officers direct the work of the labourers and others employed under them, and are carefully trained in the respective duties required of them and their staffs.

The Minister in charge of the State forests and all afforestation-work is the Commissioner of State Forests, and each year he lays before Parliament a report on the year's operations. The permanent officer in charge of the branch is the Under-Secretary of Lands, who has supreme administrative control over all operations; and it is to him that the Superintending Nurserymen report, and from him that they take instructions. The financial considerations and all forestry problems that arise from time to time are dealt with by him.

The cost of afforestation operations is defrayed by the sale of timber in State forests, supplemented by a contribution from the Consolidated Fund annually voted by Parliament. Owing to the youth of the plantations, and the immaturity of the timber therein, no returns have yet been derived from them, but it is hoped that in a few years' time a small revenue may be received, which will grow gradually larger as thinnings are available for disposal. When an assured return of thinnings is available in sufficient quantity there may be a possibility of utilizing them for wood-pulp purposes. This is a matter for future consideration, as it depends largely as to whether the timber grown is suitable for that purpose.

Generally speaking, most of the seed is procured abroad until our own trees are large enough to become seed-producers—say, in ten years' time—and the trees now grown in the State nurseries and plantations are those that continental experience and the results of experiments in New Zealand have shown are best fitted for the soils and climate of this country. The primary object of the Government is purely utilitarian, as only those trees are grown that are suitable for commercial purposes, and the fact that the formation

of plantations will in many cases enrich the soil, regulate to a slight degree the temperature, and conserve the rainfall is more or less secondary, although no efforts have been spared to gain the greatest possible benefits from the operations of the State in this respect.

In almost every country in the world where forestry operations have been carried on it has been found that sooner or later forms of plant-disease inevitably make their appearance. In some instances great havoc has been worked, whilst of late years modern methods and discoveries have largely diminished the attendant dangers. It is of the utmost importance that in this fruitful land, where the conditions are so eminently favourable to plant-growth, that the equally favourable conditions to the formation and dissemination of plant-disease should be continuously and carefully watched, so that the smallest outbreak of any kind of disease may at once be notified, and every possible precaution taken to deal with it at the very commencement of its attack. Up to the present the indications of disease have been very small, but in order that the scrutiny of the officers of the Forestry Branch may be directed into the proper channels, and that the best advice may be available on this point, a special examination has recently been made by the Biologist of the Department of Agriculture, who has supplemented the constant supervision of the officers with a personal inspection in their company.

As time goes on, and the trees attain a greater age, whilst the area under plantation annually increases, such inspections will be made at frequent intervals; and by a rigid scrutiny of all plants apparently suffering from any disease or trouble it is hoped that disease may be kept well in check, and never permitted to spread beyond a confined radius where it originates.

Seeing that the plantations are still young, and that their area only extends to about 15,000 acres, it has been possible to carry on operations with a somewhat inexpensive staff of officers, and no great expenditure in the way of administration has yet been necessary. It has been absolutely necessary to employ the funds at the disposal of the Forestry Branch to their fullest extent in the direction of tree-planting, and consequently a rigid check has been kept upon all outlay that was not immediately and directly needed for present operations. In the future it will undoubtedly be necessary to increase the staff, and provide for duties and needs that have as yet hardly entered into practical consideration. Even under these conditions, however, it is essential that no lavish expenditure shall be entered upon, but that the best possible results shall be attained from every new departure. As the scope of operations widens, it will undoubtedly be necessary to select and specially educate a few able and intelligent young New-Zealanders to fill the positions that will later on be required for the development and skilful management of the State plantations, and it is thought that a practical training in the nurseries and plantations of the branch, combined

with a University education comprising those subjects specially appertaining to forestry (such as botany, entomology, geology, agricultural chemistry, and other subjects included in the degree of Bachelor of Science), and possibly a visit to the best schools and works in England and the Continent, will enable the operations of the Government to be conducted with the highest degree of economy and efficiency, and insure the best results being attained from past and future expenditure.

Every day increases the store of knowledge and literature appertaining to scientific forestry, and it is of the utmost importance that the training and methods of the officers of the branch should be as complete and efficient as it is possible to insure. At the present time both of the Superintending Nurserymen conduct a winter class, in which all the nurserymen and officers under their control have an opportunity of learning all that can be taught them of the work of their profession, and useful reference libraries have been established in each Island at the headquarters. The keenness and intelligence of the members of these classes is in the highest degree praiseworthy, and reflect the greatest credit on their instructors, and their individual efforts to advance in knowledge and usefulness.

Seeing how far the operations of any particular industry or business extend in modern days, and from what numerous sources it is necessary to gain information and assistance in order to achieve the best results, it will naturally be easily understood that the occasional services and advice of various officers of the Government service may from time to time be requisitioned for, and availed of, in connection with the work of tree-planting. A periodical inspection by a skilled biologist, an occasional examination by an agricultural chemist, visits by modern botanists and entomologists, for instance, will be of immense use in aiding the efforts of the permanent officers of the Forestry Branch; and it may be advisable later on to form a special advisory board of such experts, who would from time to time study and report upon any extraordinary or unexpected development in connection with the operations, and advise (if necessary) upon the general questions affecting the work of afforestation and timber-conservation. It is, however, to be distinctly understood that though it is essential to keep a watchful eye upon modern developments, and to display a foresight compatible with the importance of the subject, it is quite out of the question to lay down any hard-and-fast rules as to future management and administration; and the Government will in all cases be guided by the exigencies of each case as it arises, and meet the problems that constantly arise with the best means at its disposal, and in accord with the special circumstances of the matter. Possible future changes are merely indicated to show that the Government is fully alive to the needs of State afforestation in all its varying phases, and is facing future needs with foresight and discrimination.

FISHERIES.

[By the CHIEF INSPECTOR OF FISHERIES.]

THE number of fishing-boats licensed in the Dominion for the year ending 31st December, 1910, was 1,187, as against 1,216 in 1909.

The return of fishermen and others employed in the fishing-industry for the past twelve months is not yet available from the census taken this year, but from the census taken in 1906 the number employed in connection with the industry was as follows :—

Fishermen and oystermen	941
Fish-salesmen and oyster-dealers	378
Fish-curers	73
Total number	1,392

	£	s.	d.
The value of fish exported in 1910 was ..	25,106	0	0
The value of oysters exported in 1910 was ..	2,617	0	0
The value of whalebone exported in 1910 was ..	1,010	0	0
The value of whale-oil exported in 1910 was ..	1,609	0	0
Total value	£30,342	0	0
The total value of dried, salted, and canned fish imported in 1910 was	£68,635	0	0

There is no doubt but that fish-life abounds all round the coast of New Zealand. Wherever fishing for marketable fish has been carried on and new fishing-grounds prospected marketable fishes in large quantities have been found to exist. With a few exceptions the fishing-grounds which have so far been worked may be said to be those within easy reach of the principal centres. Two firms have, however, lately commenced operations at the Chatham Islands, where they have established fish cleaning and freezing stations. The shipments of fish brought up from there have arrived in splendid condition, and the fish have met with ready sale at a remunerative price.

The fishing-grounds which have been principally worked up to the present time are the Bay of Islands, Hauraki Gulf and Great Barrier, Thames, Kaipara and Manukau, Bay of Plenty, Hawke's Bay, Wellington and Cook Strait, Marlborough Sounds, Tasman and Golden Bays, Pegasus Bay and round Banks Peninsula, Timaru, Oamaru and Moeraki, from Waikouaiti to Nugget Point, and Stewart Island and Foveaux Straits to Preservation Inlet.

At the Bay of Islands the principal fish taken are mullet, schnapper, flounders, hapuku, and crayfish. The mullet are canned at Mr. Mountain's factory, at Porerua, and the other fish are sent to the towns and settlements inland and to Auckland. Fifty-nine fishing-boats were licensed at Russell last year, most of them being good sized oil-engined launches, with a few small sail-boats.

At Auckland 244 fishing-boats were licensed last year and fished over the Hauraki Gulf and Great Barrier fishing-grounds; the prin-

cipal fish marketed being schnapper, mullet, hapuku, tarakihi, flounders, and crayfish.

At the Thames, flounders, schnapper, and mullet are the fish principally caught, and the market for the fish is Auckland and all the inland towns south of Auckland and as far south as Palmerston North and Wellington. Forty-one boats were licensed to fish at Thames last year.

Mullet, flounders, and schnapper are the fish principally caught in the Kaipara and Manukau Inlets. After supplying local requirements the balance of the fish is sent to the Auckland market. There are two mullet canneries in the Kaipara—one at Batley and the other at Helensville. Thirty-one boats were licensed last year.

The prospecting cruise of the "Nora Niven" in 1907 proved that extensive and prolific fishing-grounds exist in the Bay of Plenty. The best trawling-grounds were found between Whale Island and Cape Runaway, where very large and consistent hauls of fish were made with the trawl net. The most plentiful fish taken were schnapper, tarakihi, gurnard, hapuku, and kingfish. The western side of the Bay is worked by launches and small sailing-boats from Tauranga; 32 of these vessels were licensed to fish at Tauranga last year.

The Hawke's Bay fishing-grounds have for a number of years supplied most of the fish required for the towns from Napier to Wellington. The fishing is principally done by steam-trawlers, two of them—the "Nora Niven" and "Countess"—being large vessels with cool-storage for their fish, are able to stay out for a week at a time, if necessary, and frequently work the grounds to the north of the Mahia, and make occasional trips to the Bay of Plenty. During the last three years the supply of flat fish on the old trawling-grounds in Hawke's Bay has been rather poor. Owing to the "slime" which made its appearance in the bay in the early summer of last year the fishing was very poor; while it lasted trawling was almost at a standstill. The Hawke's Bay fishing-grounds have always yielded a good variety of fish, including soles, flounders, brill, schnapper, kingfish, hapuku, trevalli, tarakihi and moki. Sixty-two fishing-vessels of all sizes were licensed at Napier last year.

The fishing-grounds of Wellington and Cook Straits are almost entirely worked by oil-launches and small sailing-boats. Good trawling-grounds exist in Cloudy Bay and off Kapiti Island, and they are occasionally worked by some of the Napier trawlers. The fish taken on the Wellington and Cook Strait grounds include blue-cod, red-cod, moki, trevalli, schnapper, tarakihi, flounders, warehou, butterfish, hapuku, and kahawai. The number of boats licensed at Wellington last year was 61.

The principal fish caught in the Marlborough Sounds are blue-cod, butterfish, hapuku, and herrings. The boats used are almost all oil-launches; 32 of these vessels being licensed last year.

Extensive fishing-grounds exist in Tasman and Golden Bays. Trawling was successfully carried on there some years ago by the "Doto," "Nora Niven," and other vessels, but owing to the expense of getting their fish to the Wellington market it was discontinued, and the fishing is now being done by oil-launches. These grounds yield a splendid variety of fish, consisting of soles, flounders, brill, schnapper, tarakihi, moki, hapuku, gurnard, hake, and kingfish. These are the only fishing-grounds where the real hake (*Totella rhacinus*) has yet been taken in large quantities. Fifty-one boats were licensed to fish at Nelson last year.

The principal fishing-grounds worked off the Canterbury coast are Pegasus Bay, round Banks Peninsula, and off Timaru. The number of fishing-vessels licensed at Lyttelton last year was 199, and 28 at Timaru. At present there are four steam-trawlers working from Lyttelton, the other vessels both at Lyttelton and Timaru being oil-launches and sailing-boats. The principal fish caught are flounders, soles, brill, kingfish, moki, hapuku, tarakihi, and crayfish.

Thirty fishing-boats, principally oil-launches, were licensed at Oamaru last year. These work the grounds off Oamaru and Moeraki as far south as Shag Point. The principal fish taken are blue-cod, red-cod, hapuku, moki, tarakihi, and kingfish.

At Dunedin and Port Chalmers 95 boats were licensed last year, four of these were steam-trawlers and the rest sailing-boats and oil-launches. The trawling-grounds off the Otago coast have been successfully worked for a number of years, and continue to give satisfactory results. The principal fish taken by all classes of boats working from Port Chalmers and Nugget Bay are flounders, soles, hapuku, red-cod, tarakihi, moki, kingfish and barracouta.

At Invercargill and Bluff 127 fishing-vessels were licensed last year. Two of these were steamers carrying trawling-gear and a lining outfit, the others were cutters used in blue-cod fishing and oystering, and oil-launches and sailing-boats. The fishing in Foveaux Straits, round Stewart Island, and in Preservation Inlet is principally for blue-cod, the bulk of which is exported to Melbourne and Hobart. A good variety of the other best kinds of market fish is also plentiful on these grounds. A large extent of good trawling bottom well stocked with flat fishes was found in Tewaewae Bay during the prospecting cruise of the "Doto" in 1900. Since that time these grounds have occasionally been fished by trawlers from the Bluff with very satisfactory results. The extensive natural oyster-beds in Foveaux Straits so far show no sign of depletion. They continue to yield annually a very large supply, part of which is required for consumption in the Dominion and the balance is shipped to Melbourne. The value of oysters exported from these beds last year amounted to £2,617.

Whaling.—At the present time a good deal of attention is being given to whaling. Messrs. Jagger and Cook, who have been engaged in the industry for a number of years, have now established a very

serviceable whaling-plant at their Whangamumu Station, and they have lately brought from England an up-to-date whaling-steamer which is fitted with the most modern appliances for killing and handling whales. Several Norwegian whaling firms have for some time been making inquiries about whaling off the coast of New Zealand, and it is understood that some of them have now decided to commence operations in the seas surrounding these islands.

Marine Fish Hatchery Work.—Valuable work continues to be done at the Marine Hatchery at Portobello. The Curator has been remarkably successful with the lobster hatching and the care of these crustaceans in confinement. He is also doing valuable work in connection with hatching the spawn of some of our indigenous fishes and in making a study of their life habits. A cottage has lately been erected for the assistant, and the subdivision of the tidal ponds in front of the hatchery is now in hand.

Acclimatization of Salmon.—Quinnat salmon continue to return from the sea and spawn in the Waitaki River and its tributaries in increasing numbers every year. It is now five years since the first of these salmon were found spawning naturally in the Waitaki River, and every season since then they have been returning in increasing numbers. It would seem that they are now firmly established in the waters of the Dominion. About a quarter of a million salmon eggs were collected last spawning season, 22,500 of these were forwarded to the Tasmanian Government, and the balance was sent to the West Coast for the purpose of stocking the Hokitika River with these fish.

The attempt to acclimatize the Atlantic salmon in the Waiau River is now being persevered with. Two shipments of a million salmon eggs in each were received from England during the last three years. The eggs arrived in very good condition, and hatched out with a very small percentage of loss after arrival. In the case of the acclimatization of the quinnat salmon, six shipments of eggs were made before success was proved, and it will no doubt be necessary to import two or three more lots of Atlantic salmon eggs before we can reasonably expect to be successful with them.

SECTION III.

THE MINERAL WATERS OF NEW ZEALAND.

[By ARTHUR S. WOHLMANN, M.D., Lond., Government Balneologist.]

NEW ZEALAND is a country peculiarly rich in mineral waters, and, as might be expected in a land in which volcanic agencies are still active, more particularly rich in thermal waters distinguished by a very high temperature rather than by a high percentage of dissolved salts, though the latter class of water is by no means absent. The vast majority of thermal springs are found in the North Island, and arise over a very large area.

Of these springs, a large proportion have never yet been analysed, many are known only to a few individuals, and doubtless many yet remain to be discovered, or, if known at all, are only known to the local Maori population. A sufficient number, however, have now been examined to enable a very fair classification of the whole to be attempted, and, as will be seen by the subjoined tables, with the exception of the sulphated waters, there are few of the more important types of mineral water that are not represented among the springs of this country.

The different classes of mineral water have a rough general plan of geographical distribution, so that the probable nature of a spring may to a certain extent be inferred by its position on the map, though this is a rule with many exceptions, and the point must not be pressed too far. Thus in the central pumice plateau, from the south of Taupo to Rotorua and thence on to the Bay of Plenty, the vast majority of the springs are very hot, sulphuretted, siliceous, and weakly mineralized; while along the east coast, from the East Cape to Cape Palliser, muriated waters of high specific gravity, and containing iodides, predominate.

The following classified list of waters is based almost entirely on the analyses recorded in the reports of the Dominion Museum and Laboratory, published by the Mines Department, between the years 1874 and 1909, and of these a large proportion of the more important have recently been made by Dr. Maclaurin. On account of the space which would be required to give the full detailed analysis of each specimen, only the essential and characteristic ingredients are given here, together with the total grains per gallon of solid constituents. In all cases, however, in which the analyses have been taken from the above reports, the year is also given to facilitate reference should fuller details be required.

For further information on this subject the reader is referred to the paper by Mr. W. Skey in the Transactions of the New Zealand Institute, 1877, to several published pamphlets by Mr. J. A. Pond, and to the article by the late Sir James Hector in the Official Year-book, 1893. The names Skey, Pond, and Hector at the head of an analysis have reference solely to the above-mentioned papers.

Owing to the large number of their contained ingredients, a scientific classification of mineral waters is a very difficult matter, and all the methods of classification usually adopted are open to criticism. Under Dr. Peale's system a fair amount of accuracy is arrived at, but only at the price of a cumbersome and uncouth string of adjectives; while in the simpler system which is usually adopted by English writers, and which I have for convenience followed here, a water may often with equal justice be classified under two or more headings, owing to its containing several ingredients of practically equal importance, and in such cases a compromise has to be adopted.

For purposes of comparison a well-known example of a European mineral water is given with each class except, of course, in those rare instances in which a New Zealand water has no corresponding European prototype.

SIMPLE THERMAL WATERS.

These waters are very weakly mineralized, and owe their therapeutic value chiefly to the hot water, used in the form of baths. That some of the most famous spas in the world are supplied only with such waters suffices to show the efficacy of hot water when skilfully employed, and it is noteworthy that it is in such spas that the douche treatment is frequently brought to a pitch of great perfection. There remains, of course, the still-disputed point as to whether these waters may not owe their efficacy to some factors not indicated by the chemical analysis; and recent developments in science have so far modified our conceptions of the nature of matter and of energy that a dogmatic expression of opinion is less likely to be advanced now than was the case some years ago.

EUROPE.				
<i>Gastein.</i>				
Total solids	..	..	..	21.0*
Temperature	..	..	..	121° Fahr.
NEW ZEALAND.				
<i>Waingaro (1904).</i>				
Sodium-chloride	..	..	..	6.43
Silica	..	..	..	7.80
Total solids	..	..	..	22.66
Temperature	..	..	..	130° Fahr.

Here, and throughout this paper, the figures are given in grains per gallon.

<i>Matamata (1904).</i>			
Sodium-bicarbonate	..	..	28.10
Total solids	..	..	46.66
Temperature	..	..	106° Fahr.
<i>Mangawhero.</i>			
Sodium-bicarbonate	..	..	44.7
Total solids	..	..	68.8
Temperature	..	..	110° Fahr.
<i>Maruia (1903).</i>			
Total solids	..	..	36.5
Temperature	..	..	140° Fahr.
<i>Mount Egmont (1883).</i>			
Calcium-carbonate	..	..	6.72
Total solids	..	..	26.23
<i>Hurunui (1885).</i>			
(Complete analysis not available.)			
<i>Franz Josef (1901).</i>			
Total solids	..	..	56.21
(Principally sodium chloride and carbonate.)			
<i>Lake Sumner. (Skey.)</i>			
Total solids	..	..	18.56
Temperature	..	..	93° Fahr.
<i>Miranda, Thames. (J. A. Pond.)</i>			
Sodium-chloride	..	..	15.17
Total solids	..	..	31.27
Temperature	..	..	134° Fahr.
<i>Katikati (1904). (Vide also "Muriated Waters.")</i>			
Sodium-chloride	..	..	119.54
Total solids	..	..	137.26
<i>Okoroire.</i>			
Sodium-chloride	..	..	17.18
Silica and silicates	..	..	9.70
Total solids	..	..	42.34
Temperature	..	..	113° Fahr.
<i>Hauptiri (1901)</i>			
Sodium-silicate	..	..	7.3
Total solids	..	..	19.3
<i>Whangape, Waikato (1909).</i>			
Sodium-chloride	..	..	17.25
Total solids	..	..	35.50
Temperature	..	..	150° to 200° Fahr.
<i>Te Teko (1909).</i>			
Sodium-bicarbonate	..	..	14.2
Total solids	..	..	26.2
Temperature	..	..	150° Fahr.
<i>Roadman's Bath, Waiotapu (1909).</i>			
Sodium-chloride	..	..	40.9
Total solids	..	..	69.7
Temperature (at source)	..	..	212° Fahr.
<i>Taheke, Rotoiti (1908).</i>			
Silica	..	..	15.0
Total solids	..	..	27.5
Temperature	..	..	212° Fahr.

MURIATED WATERS.

The principal ingredient of these waters is common salt. In this country they are, in the majority of instances, very hot, and are used both for baths and for drinking purposes. In the former case they exert a stimulating effect on the nerve-endings in the skin; while, taken internally, they stimulate the mucous membrane of the gastro-intestinal tract, and have a diuretic, and sometimes a laxative, effect.

No use has been hitherto made in New Zealand of the concentrated *mutterlauges* so much used on the Continent of Europe, though indeed some of the waters are so strong naturally as to need little concentration to rival these "mother-liquors" in strength.

Taken as a whole, they constitute an important and numerous group, and are distinguished by their geographical distribution and by certain chemical peculiarities. Thus the great majority arise near the coast, especially the east coast of the North Island. A great number of the waters, too, contain very considerable quantities of calcium-chloride and of sodium-iodide, so that the muriated waters fall naturally into three main groups—those containing a great preponderance of sodium-chloride, those in which calcium-chloride is present in so great a quantity as to rival or even surpass the sodium-chloride in importance, and those in which sodium-iodide is present in noticeable quantities. The great majority of the second class, however, belong also to the third. A few springs, containing magnesium chloride, have been included as a fourth group.

CLASS I.—SODIC MURIATED WATERS.

EUROPE.

Wiesbaden.

Sodium-chloride	..	..	..	420
Temperature	..	..	..	100° to 156° Fahr.

NEW ZEALAND.

Helensville (1889, 1903). (*Vide* also "Iodide Waters.")

Sodium-chloride	..	..	..	114.46
Total solids	..	..	..	134.68
Temperature	..	..	..	115° to 146° Fahr.

Hokianga (1878). (*Pord.*)

Sodium-chloride	..	..	..	2797.4
Total solids	..	..	..	2937.5

Hokianga, Rotokakahi (1905).

Sodium-chloride	..	..	..	1350.0
Total solids	..	..	..	1543.0

Patangata (1902). (*Vide* also "Chalybeate" and "Iodide Waters.")

Sodium-chloride	..	..	..	152.2
Total solids	..	..	..	176.4

Waimate 1889). (*Vide* also "Iodide Waters.")

Total solids	..	..	..	586.63 to 834.32
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<i>Papaite, Wanganui (1886)</i>				
Sodium-chloride	..	..	..	313.41
Total solids	..	..	..	348.54

Pipiriki, Wanganui (1888).

Spring on left bank—Sodium-chloride	..	..	..	121.88
Total solids	..	..	..	130.61
Spring on right bank—Sodium-chloride	..	..	..	231.64
Total solids	..	..	..	244.03

Mokau, Motukarama (1888). (Vide also "Iodide Waters.")

Total solids	..	..	..	844.0
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(Incomplete analysis.)

Kotuku, Greymouth (1904). (Vide also "Chalybeate Waters.")

Sodium-chloride	..	..	..	162.20
Total solids	..	..	..	201.25

Katikati (1904).

Sodium-chloride	..	..	..	119.54
Total solids	..	..	..	137.26

Whangape, Waikato. (Skey.)

Total solids	..	..	..	47.04
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McLean's, Napier. (Skey.)

Total solids	..	..	..	444.7
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Mahurangi, Auckland. (Skey.)

Total solids	..	..	..	141.0
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Mercury Bay (1908).

Sodium-chloride	..	..	..	200.8
Total solids	..	..	..	259.4

CLASS II.—CALCIC-SODIC MURIATED WATERS.

The nearest European prototype to such a class of waters is Kreuznach.

Calcium-chloride	..	..	..	140.0
Sodium-chloride	..	..	..	700.0

When this and similar waters are evaporated to a *mutterlauge*, as is so frequently done, thereby precipitating some of the sodium-chloride, and leaving a concentrated solution of the chlorides of magnesium and calcium with some iodides, a striking resemblance is found to certain of the New Zealand waters.

NEW ZEALAND.

Kawhia (1903). (Vide also "Iodide Waters.")

Calcium-chloride	..	..	..	585.51
Sodium-chloride	..	..	..	424.55
Total solids	..	..	..	1040.76

Mataroa (1903). (Vide also "Iodide Waters.")

Calcium-chloride	..	..	..	128.21
Sodium-chloride	..	..	..	1625.25
Magnesium-chloride	..	..	..	85.70
Total solids	..	..	..	1843.43

Okain's Bay (1904). (*Vide* also "Chalybeate Waters.")

This is an artificial spring of cold water obtained from a bore sunk into the recent soil of a rapidly silting-up bay, and is remarkable for the unusually large amount of iron in solution.

Calcium-chloride	..	..	..	468.5
Sodium-chloride	..	..	..	295.5
Magnesium-chloride	..	..	..	264.8
Ferrous bicarbonate	..	..	..	26.7
Total solids	..	..	..	1128.9

Totoro, Mokau River (1905). (*Vide* also "Iodide Waters.")

Calcium-chloride	..	..	..	681.0
Sodium-chloride	..	..	..	784.0
Total solids	..	..	..	1496.0

Morere (1903, 1905). (*Vide* also "Iodide Waters.")

Calcium-chloride	..	..	..	594.78
Sodium-chloride	..	..	..	1249.67
Total solids	..	..	..	1899.60
Temperature	..	..	..	120° Fahr.

Te Puia (1906). (*Vide* also "Iodide Waters.")

Calcium-chloride	..	..	..	153.40
Sodium-chloride	..	..	..	807.75
Total solids	..	..	..	978.69
Temperature	..	..	..	150° Fahr.

Kopuowhara, Mahia (1885). (*Vide* also "Iodide Waters.")

Calcium-chloride	..	..	..	177.82
Sodium-chloride	..	..	..	1027.66
Total solids	..	..	..	1241.65

Great Barrier Island (1904).

Calcium-chloride	..	..	..	103.75
Sodium-chloride	..	..	..	791.50
Total solids	..	..	..	985.23
Temperature	..	..	..	180° Fahr.

Pahaua, Wellington (Skey); also 1878). (*Vide* also "Iodide Waters.")

Calcium-chloride	..	..	..	120.88
Sodium-chloride	..	..	..	1303.32
Total solids	..	..	..	1474.09

Kotuku, Greymouth (borehole), (1904).

Calcium chloride, sulphate, and bicarbonate	..	..	..	458.8
Sodium-chloride	..	..	..	5134.0
Total solids	..	..	..	5936.8

Wallingford, Wellington (Skey). (*Vide* also "Iodide Waters.")

Total solids	..	..	..	826.0
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Mercury Bay (1908).

Calcium-chloride	..	..	..	21.6
Calcium-bicarbonate	..	..	..	22.5
Sodium chloride	..	..	..	200.8
Total solids	..	..	..	259.4

CLASS III.—IODIDE MURIATED WATERS.

Iodine is found in these waters combined usually with sodium or magnesium; in addition there is generally present a certain and varying amount of free iodine. The amount of iodide present is seldom more than about 2·5 grains per gallon, but even this small quantity exceeds the amount present in most similar European waters, one of the richest of which, Heilbrun (Bavaria), is given here for comparison.

The therapeutic value of such minute quantities of iodide has been much questioned, though Neisser has, on the other hand, pointed out the potent effect on human metabolism of minute quantities of iodine in thyroid extract. There remains the possibility, however, that the essentially active factor in these waters is not the iodide but the *free nascent iodine*, which is almost always present. The pungent smell of this mineral may generally be detected for some distance round the source of an iodide spring, and where the thermal water is broken up by a fall into a spray or douche, under which circumstances free iodine seems to be liberated, the odour is unmistakably strong. It is conceivable that, quite apart from the iodine that is taken into the system when the water is drunk, quite an appreciable amount, and that in a highly active condition, may be inhaled with the water vapour and spray by the bather.

EUROPEAN.

Heilbrun (Bavaria).

Sodium-chloride	..	..	..	343·0
Sodium-bicarbonate	..	..	..	63·0
Sodium-bromide	..	..	..	3·5
Sodium-iodide	..	..	..	2·1

NEW ZEALAND.

Morere (1903, 1905).

Sodium-iodide	..	..	..	2·7
Total solids	..	..	..	1858·07

(Also sufficient free iodine to tinge the water light-brown.)

Kawhia (1903).

Sodium-iodide	..	..	..	0·47
Bromides	..	..	..	Trace
Total solids	..	..	..	1040·76

Mataroa (1905).

Sodium-iodide	..	..	..	1·41
Total solids	..	..	..	1879·60

Pahaua (1878; also Skey).

Magnesium-iodide	..	..	..	0·582
Magnesium-bromide	..	..	..	Traces
Iodine (free)	..	..	..	1·595
Total solids	..	..	..	1424·096

Kopuowhara, Mahia (1885).

Magnesium-iodide	..	..	..	2·98
Total solids	..	..	..	1241·65

Whareama, Masterton (1889).

Iodides ..	..	..	..	0.81
Total solids	..	..	..	316.36

Kaiti, Gisborne (1902).

Sodium-iodide	..	..	..	4.0
Total solids	..	..	..	758.3

(This spring is now practically dried up.)

Totoro (1905).

Iodine not estimated.				
Total solids	..	..	..	1496.0

Patangata (1902).

Potassium-iodide	..	..	..	0.5
Total solids	..	..	..	177.0

Raukumara, Waimate (1909).

Sodium-iodide	..	..	..	1.3
Total solids	..	..	..	783.6

Helensville (1903).

Sodium-iodide	..	..	..	0.03
Total solids	..	..	..	134.68

Te Puia (1906).

Sodium-iodide	..	..	..	1.41
Total solids	..	..	..	978.69

Tarawera, Taupo District (1908).

Iodine ..	..	..	..	0.25
Total solids	..	..	..	100.0

Parke's Spring, Taupo District. (Skey.)

Iodine ..	..	..	..	1.01
Total solids	..	..	..	200.73

Otumuheka, Taupo District. (Skey.)

Iodine not estimated.				
Total solids	..	..	..	13.88

Ruahine, Taupo District. (Skey.)

Iodine not estimated.				
Total solids	..	..	..	152.31

Orakeikorako, Taupo District. (Skey.)

Iodine not estimated.				
Total solids	..	..	..	84.86

Orakeikorako (Alum Cave). (Skey.)

Iodine not estimated.				
Total solids	..	..	..	56.4

McMurray's, Taupo District. (Skey.)

Iodine not estimated.				
Total solids	..	..	..	33.12

Te Hukahuka, Taupo District. (Skey.)

Iodine not estimated.				
Total solids	..	..	..	13.81

Burton's, Taipo District. (Skey.)

(Analysis incomplete.)

Wallingford, Wellington. (Skey.)

Iodides and bromides not estimated.

Total solids	..	..	..	826.0
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McLean's, Napier. (Skey.)

Iodides and bromides not estimated.

Total solids	..	..	..	444.7
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Sulphur Wells, Masterton (1906).

Sodium-iodide	..	..	..	1.5
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Total solids	..	..	..	728.2
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Mangapuaka, Dannevirke (1909).

Sodium-iodide	..	..	..	2.4
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Total solids	..	..	..	851.3
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CLASS IV.—MAGNESIC-SODIC MURIATED WATERS.

These springs are cold, and arise for the most part in the neighbourhood of Banks Peninsula. There are several round Lyttelton Harbour, containing from 30 grains to 50 grains per gallon of magnesium-chloride, with about 2 grains of ferrous bicarbonate. Similar, but weaker, springs also arise at Te Aroha.

EUROPE.

Friedrichshall.

Sodium-chloride	..	..	..	1680.0
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Magnesium-chloride	..	..	..	840.0
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NEW ZEALAND.

Okain's Bay (1904).

Sodium-chloride	..	..	..	295.5
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Magnesium-chloride	..	..	..	264.8
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Total solids	..	..	..	1128.9
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SIMPLE ALKALINE WATERS.

The principal ingredient in these waters is sodium-bicarbonate, and if sodium-chloride is present, it is so only in a trifling amount. There is also generally present a considerable amount of carbonic-acid gas. Such waters are not common in this country, the only characteristic one, so far as I am aware, being Puriri.

Taken internally they act as antacids and diuretics, and promote the biliary secretion. They are useful in certain forms of gout, but are more suitable for robust than for debilitated subjects.

There are no waters of this class used as baths in New Zealand.

EUROPE.

Vichy.

Sodium-bicarbonate	..	..	..	350.0
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Temperature	..	..	..	89° to 108° Fahr.
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NEW ZEALAND.

Puriri. (*Vide* also "Table-waters.")

Sodium-bicarbonate	..	..	..	452.39
Total solids	..	..	..	537.11
Temperature	..	..	..	60° Fahr.

Waikoura, Kase (1909).

Sodium-bicarbonate	..	..	..	126.6
Calcium-bicarbonate	..	..	..	127.5
Total solids	..	..	..	304.1

MURIATED ALKALINE WATERS.

In these waters considerable quantities of sodium-chloride are present with the bicarbonate, and, while they are useful in the same class of cases as the last, they are generally believed to be less "lowering."

EUROPEAN.

Ems.

Sodium-chloride	..	..	..	70.0
Sodium-bicarbonate	..	..	..	140.0
Temperature	..	..	..	80° to 120° Fahr.

NEW ZEALAND.

Te Aroha (1903, 1904, 1905).

Sodium-chloride	..	..	..	59.5
Sodium-bicarbonate	..	..	..	657.4
Total solids	..	..	..	784.3
Temperature	..	..	..	135° Fahr.

Waiwera. (Skey ; also 1904.)

Sodium-chloride	..	..	..	116.7
Sodium-bicarbonate	..	..	..	87.5
Total solids	..	..	..	219.5
Temperature	..	..	..	105° Fahr.

Ohacawai (1904).

Sodium-chloride	..	..	..	65.10
Sodium-bicarbonate	..	..	..	134.50
Total solids	..	..	..	255.66
Temperature	..	..	..	180° Fahr.

(This water is strongly sulphuretted, and might with equal justice be placed among the sulphur waters. For further analyses of the Ohacawai Springs, *vide* Rep. Domin. Lab. 1909.)

MURIATED SULPHATED WATERS.

As already mentioned, the sulphated waters are scarcely represented in New Zealand, the only example, so far as I am aware, being the somewhat anomalous Okain's Bay water, already classed under the calcic muriated and chalybeate waters.

This water, while containing an overwhelming proportion of chlorides, contains also a moderate amount of magnesium-sulphate, any action of which, however, would be subordinate to that of the other ingredients.

EUROPE.

Brides, Salins.

Sodium-chloride ..	..	..	126.0
Sodium-sulphate ..	..	..	84.0
Magnesium-sulphate ..	..	..	35.0
Temperature ..	..	..	96° Fahr.

NEW ZEALAND.

Okain's Bay (1904).

Sodium, magnesium, and calcium chlorides ..	1028.8
Magnesium-sulphate ..	78.0
Total solids ..	1128.9

(Cold spring.)

THE CALCAREOUS OR EARTHY WATERS.

New Zealand is poor in springs of this class, calcium, when present in any quantity, being generally in the form of the chloride.

EUROPE.

Contrexéville.

Calcium-sulphate ..	..	..	105.0
Calcium-bicarbonate ..	..	..	28.0

NEW ZEALAND.

Wairongoa. (Vide also "Table-waters.")

Calcium-bicarbonate ..	..	..	67.86
Magnesium-bicarbonate ..	..	..	35.89
Total solids ..	..	..	165.75

Kamo. (Vide also "Table-waters.")

Calcium-bicarbonate ..	..	..	57.68
Magnesium-bicarbonate ..	..	..	17.05
Sodium-bicarbonate ..	..	..	38.64
Total solids ..	..	..	164.36

Copland River, Westland (1906).

Calcium-bicarbonate ..	..	..	27.0
Sodium-bicarbonate ..	..	..	76.6
Total solids ..	..	..	142.3

Fox River, Westland (1906).

Calcium-bicarbonate ..	..	..	10.5
Sodium-bicarbonate ..	..	..	44.4
Total solids ..	..	..	79.5

CHALYBEATE WATERS.

Therapeutically the most important of these waters are those containing the bicarbonate of iron and free carbonic-acid gas. Many of the chalybeate springs of New Zealand contain large, and sometimes enormous, quantities of the sulphate, and, while these are noted here, they are, except as baths, of little practical use so far as the iron-salt is concerned. The ferrous bicarbonate, on the other hand, is easily assimilated, especially when associated with carbonic-acid gas; while it is to the presence of this gas that baths of such waters owe their stimulating properties.

EUROPE.

Schwalbach.

Ferrous bicarbonate	..	..	..	5.6
Temperature	..	..	..	Cold

NEW ZEALAND.

Waitangi, Rotoehu (1903, 1904).

Ferrous bicarbonate	..	..	..	0.5
Total solids	..	..	..	58.73
Temperature	..	..	..	120° Fahr.

(Free effervescence of carbonic acid.)

Kamo.

Oxide of iron (present in the spring as bicarbonate)	..	..	..	0.28
Total solids	..	..	..	164.36

Ohaewai, Spring No. 1 (1909).

Ferrous sulphate	..	..	..	4.1
Total solids	..	..	..	45.6

Waikoura, Kaeo (1909).

Ferrous bicarbonate	..	..	..	2.9
Total solids	..	..	..	304.1

Soda Spring, Ngawha.

Ferrous bicarbonate	..	..	..	1.2
Carbonic acid (free)	..	..	..	35.0
Total solids	..	..	..	31.8

Kotuku, Greymouth (1904).

Ferrous bicarbonate	..	..	..	4.10
Total solids	..	..	..	201.25

Okain's Bay (1904). (Vide also "Muriated Waters.")

Ferrous bicarbonate	..	..	..	26.7
Total solids	..	..	..	1128.9

Patangata (1902).

Ferrous bicarbonate	..	..	..	0.6
Total solids	..	..	..	176.4

Aorangi. (Skey.)

Ferrous bicarbonate	..	..	..	0.94
Total solids	..	..	..	13.75

Pueroa (1905). (Vide also "Table-waters.")

Ferrous bicarbonate	..	..	..	1.6
Total solids	..	..	..	167.8
Free carbonic acid	..	..	..	26.0
Temperature	..	..	..	80° Fahr.

Waiwera. (Vide also "Muriated Alkaline Waters.")

Ferrous bicarbonate	..	..	..	0.686
Total solids	..	..	..	219.558

*Taupo Waters.**Iron Spring, Terraces (1905).*

Ferrous bicarbonate	..	..	..	0.28
Total solids	..	..	..	63.04
Carbonic acid	..	..	..	16.9
Temperature	..	..	..	120° Fahr.

Mangapakeha (1906). (*Vide* also "Iodide Waters.")

Ferrous bicarbonate	..	..	..	4.0
Total solids	..	..	..	374.0

Soda-water Spring, Terraces (1905).

Ferrous bicarbonate	..	..	..	0.84
Total solids	..	..	..	64.19
Carbonic acid	..	..	..	47.70
Temperature	..	..	..	Cold.

"Arsenic Spring," the Spa (1905).

Ferrous bicarbonate	..	..	..	0.56
Total solids	..	..	..	52.52

(This spring contains no arsenic.)

*Wairakei Waters.**Devil's Eye-glass* (1905).

Ferrous bicarbonate	..	..	..	1.20
Total solids	..	..	..	117.25

The Boilers (1905).

Ferrous bicarbonate	..	..	..	1.12
Total solids	..	..	..	100.77

(These last two waters are scarcely potable.)

Waiotapu.

Chalybeate waters exist here, but so far no potable specimens have been analysed.

Rotomahana "Iodine Spring" (1904). (Contains no iodine.)

Ferrous bicarbonate	..	..	..	0.62
Total solids	..	..	..	157.79
Temperature	..	..	..	212° Fahr.

Motu, Gisborne (1904).

Ferrous sulphate	..	..	..	44.68
Total solids	..	..	..	379.31

White Island. (Skey.) (*Vide* also "Acid Waters.")

Ferrous sulphate	..	..	..	1059.0
Total solids	..	..	..	13638.0
Temperature	..	..	..	212° Fahr.

Whale Island. (Pond.)

Ferrous sulphate	..	..	..	9.38
Total solids	..	..	..	250.30
Temperature	..	..	..	198° Fahr.

Abbotsford, Otago (1882). (Analysis incomplete.)

Ferrous sulphate.	..	..	..	304.0
Total solids	..	..	..	

Akitio, Wellington. (Skey.)

Iron and alumina	..	..	..	0.93
Total solids	..	..	..	37.65

Onetapu. (Skey.)

Ferrous chloride not estimated.	..	..	..	
Total solids	..	..	..	456.0

<i>Bay of Islands. (Skey.)</i>				
Iron-oxide	..	..	..	2.23
Total solids	..	..	..	134.62
<i>Amberley Canterbury. (Hector.)</i>				
Total solids	..	..	..	93.6
<i>(Cold spring.)</i>				
<i>Waikohu (1910).</i>				
Ferrous sulphate	..	..	..	1.5
Aluminium sulphate	..	..	..	93.0
Total solids	..	..	..	210.5

Rotorua Waters.

The majority of these contain iron, but, as this is not an important and essential feature of these waters, two only are given as types of the rest.

<i>Rachel Spring. (Hector.)</i>				
Iron and alumina oxides	..	..	..	2.41
Total solids	..	..	..	131.34
<i>Postmaster Spring (1906)</i>				
Ferrous sulphate	..	..	..	0.52
Total solids	..	..	..	86.81

SULPHUR WATERS.

This is a very important but somewhat ill-defined group, characterized by the presence of sulphides in sufficient quantity to give a very noticeable odour to the water. In Europe, as a general rule, these waters are only feebly mineralized, the other ingredients of the water being comparatively unimportant. In New Zealand, while this rule holds good for the majority of the sulphur waters, yet there is a very important class, of which the acid waters of Rotorua may be taken as a type, in which, while the sulphides are very much in evidence, other ingredients have a considerable and sometimes a very much greater importance.

As compared with the other mineral waters of New Zealand, there is an overwhelming preponderance of sulphur waters, both in the number of springs and in the amount of outflow. All are hot and all are siliceous.

The great bulk of these springs arise in the volcanic region stretching from the central volcanoes of the North Island northward to the Bay of Plenty, and, indeed, right out to sea to White Island.

The vast majority of these waters have not yet been analysed, but from the great number of specimens that have already been examined a very fair estimate may be made of the whole.

It is usual to draw a distinction between those sulphur waters containing marked quantities of sodium-sulphide, and those containing only sulphuretted hydrogen, and special therapeutic effects have been attributed to the former class. While admitting the distinction, it must be borne in mind that frequently the second represents only a phase of the first, and that, owing to the very rapid decomposition of sodium-sulphide on exposure to air, analysis,

unless performed at the spring, is apt to show only sulphuretted hydrogen, sulphur, and sodium-carbonate.

The sulphur waters may be divided into two main classes, the alkaline or neutral, and the acid.

CLASS I.—THE ALKALINE SULPHUR WATERS.

For the most part the specific gravity of these waters is not high, the largest ingredient being usually chloride of sodium, and the alkalinity not strong.

For all practical purposes their most marked characteristic is the amount of silicate they contain, and it is this ingredient which gives to the alkaline waters of the Rotorua district their peculiarly bland and satiny feel, and which makes them so valuable for bath purposes. A similar condition causes the "unctuous" sensation of the *sources savonneuses* at Plombières.

Of the therapeutic action of the silicates little is known: taken internally, it has been asserted that they exercise a solvent action on the urates in gout, and, used externally, an antiseptic action on the skin (Felix); but however this may be, it is quite certain that in strong solution they constitute most bland and sedative baths.

As the highly siliceous waters shade off imperceptibly into the less siliceous, it has not seemed convenient to make them a separate class, and they are therefore all included here under the term "sulphur waters."

EUROPE.

Aachen (Aix-la-Chapelle).

Sodium-chloride	182.0
Sodium-carbonate	42.0
Sodium and hydrogen sulphides	113° to 133° Fahr.
Temperature	

NEW ZEALAND.

Rachel Spring, Rotorua. (Hector.)

Sodium-chloride	69.43
Silicates of sodium, calcium, and magnesium	36.35
Silica	18.21
Total solids	131.34
Carbonic acid and sulphuretted hydrogen	194° Fahr.
Temperature	

Under this heading come, with the exception of certain muddy geysers of the type of Waimangu, practically the whole of the springs in the "Thermal District" which exhibit, or tend to exhibit, geyser action. Thus would be included many springs at Tokaanu, the Taupo geysers, the springs of the Geyser Valley at Wairakei, and the Whakarewarewa and Ohinemutu geysers. A certain number of these are given as types of the rest.

Many of these waters contain so very little sulphide that they might with equal justice be classed under the heading of "Simple Thermal Waters," or of "Muriated Waters," but for convenience they are placed all together here.

Oil Bath, Rotorua District. (Skey.)*

Silica and silicates	..	..	..	..	29.0
Sodium-chloride	..	..	..	..	66.34
Total solids	..	..	..	..	104.54

Spout Bath, Rotorua District. (Skey.)*

Sodium-silicates	..	..	..	..	16.32
Sodium-chloride	..	..	..	..	53.61
Total solids	..	..	..	..	87.78

Kuirau, Rotorua District. (Skey.)

Silicates	..	..	..	..	22.0
Sodium-chloride	..	..	..	..	45.70
Total solids	..	..	..	..	79.85

Te Koutou, Rotorua District. (Skey.)

Sodium-silicate	..	..	..	..	32.12
Total solids	..	..	..	..	72.78

Waihunukuri (Lake House), Rotorua District. (Hector.)

Total solids	..	..	..	..	58.4
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Waikite, Rotorua District (1904).*

Sodium-chloride	..	..	..	..	38.75
Sodium-bicarbonate	..	..	..	..	20.03
Silica	..	..	..	..	24.36
Total solids	..	..	..	..	90.28

Matuatonga, Rotorua District. (Hector.)*

Sodium-chloride	..	..	..	..	66.44
Sodium-silicate	..	..	..	..	29.27
Total solids	..	..	..	..	113.27

Hanmer†, South Island.

Sodium-chloride	..	..	..	..	62.09
Total solids	..	..	..	..	77.38
Gases—Sulphuretted hydrogen and methane	..	..	..	..	..
Temperature	..	..	..	..	118° Fahr.

Crow's Nest Geyser, Taupo District. (Hector.)*

Total solids	..	..	..	..	153.6
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Witches' Cauldron, Taupo District. (Hector.)*

Total solids	..	..	..	..	166.4
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Waiariki, Taupo District. (Hector.)

Total solids	..	..	..	..	86.4
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Top Spring, Terraces, Taupo District (1905).

Sodium-chloride	..	..	..	..	43.66
Total	..	..	..	..	105.80
Temperature	..	..	..	..	184° Fahr.

* The surface temperature of these springs, which exhibit more or less geyser action, is the boiling-point. Their temperature apparently increases directly as the distance below the surface at which it is taken. † The amount of H₂S present is so small that this water might with equal justice be classed under the heading of "Muriated Waters," or even of "Simple Thermal Waters."

South Bay Spring, Terraces, Taupo District (1905).

Sodium-chloride	..	..	..	56.10
Total	..	..	..	107.72
Temperature	..	..	..	180° Fahr.

A.C. Bath, Spa, Taupo District (1905).

Total	..	..	..	46.43
Temperature	..	..	..	102° Fahr.

Old Sulphur Spring, Spa, Taupo District.

Total	..	..	..	63.79
Temperature	..	..	..	135° Fahr.

Champagne Pool, Wairakei (1905).*

Sodium-chloride	..	..	..	195.20
Total	..	..	..	242.68

Red Coral Geyser, Wairakei (1905).*

Sodium-chloride	..	..	..	39.35
Total	..	..	..	100.77

Champagne Pool, Waiotapu.

Sodium-chloride	..	..	..	220.4
Carbonic acid (free)	..	..	..	13.2
Total solids	..	..	..	288.2
Temperature	..	..	..	212° Fahr.

Omupokapoka, Onepu (1904).

Total constituents	..	..	..	116.82
Temperature	..	..	..	180° Fahr.

Manupirua, Rotoiti (1904).

Total solids	..	..	..	44.91
Temperature	..	..	..	105° Fahr.

CLASS II.—ACID SULPHUR WATERS.

With the exception that they are much more siliceous, the alkaline sulphur waters bear a fairly close resemblance to numerous sulphur waters in Europe; but for a type of the acid sulphur waters we have to look to America, there being no waters of this nature used at the European spas. The nearest European approach to the acid baths of New Zealand is to be found in the "peat baths" of Austria, which contain free sulphuric and formic acids and sulphate of iron.

The action on the peripheral circulation of the strongly acid baths of Rotorua is most marked. The skin becomes intensely injected, there is a corresponding unloading of the deep veins, and the general circulation is improved. At the same time the nerve-endings in the skin are stimulated: so that, provided the immersion is not too prolonged, the sensation of the bather is one of general exhilaration. The use of such baths in chronic deep-seated congestions, and in pain

* The surface temperature of these springs, which exhibit more or less geyser action, is the boiling-point. Their temperature apparently increases directly as the distance below the surface at which it is taken.

and stiffness of muscular and fibrous structures, is obvious. The large quantities of alum usually present with the acids, and the free gases in the water, also help to stimulate the skin. These waters are not used for drinking purposes.

Rotorua Acid Waters.

	Postmaster Bath Spring (1906).	Priest Bath Spring (1906).	Sulphur Point Effervescing Spring (1906).	Spring supplying New Baths.
Sodium-sulphate ..	14.25	10.85	18.10	19.94
Aluminium-sulphate	15.60	9.60	8.10	12.38
Silica ..	15.10	12.10	20.20	22.82
Sulphuric acid (free)	22.29	3.77	4.46	16.80
Carbonic acid (free) ..	28.84	40.00	2.52	4.31
Sulphuretted hydrogen	13.09	5.00	0.19	1.80
Total ..	128.74	97.49	81.95	102.58
Temperature ..	110° Fahr.	105° Fahr.	160° Fahr.	150° Fahr.

There are innumerable springs in the central Rotorua group, along the foreshore of Lake Rotorua, which conform to the type of the "Priest" and "Postmaster" Springs. Of these the first two on the following list may serve as examples:—

Waikupapapa.

Hydrochloric acid (free)	..	..	..	7.49
Sulphuric acid (free)	..	..	..	4.29
Total solids ..	..	..	..	56.45

Ngaruapua.

Hydrochloric acid (free)	..	..	..	6.76
Sulphuric acid (free)	..	..	..	3.11
Total solids ..	..	..	..	59.50

Taheke, Rotoiti (1908).

Sulphuric acid (free)	..	..	..	152.0
Total solids ..	..	..	..	231.0

Horakikimumuru, Rotoiti (1908).

Sulphuric acid (free)	..	..	..	68.6
Total solids ..	..	..	..	130.5

White Island and Whale Island, in the Bay of Plenty, contain springs of remarkable acidity, which are not used as baths.

White Island. (Skey.)

Hydrochloric acid (free)	..	..	..	9547.0
Total solids ..	..	..	..	13638.0
Temperature ..	..	..	..	212° Fahr.

White Island Lake (1910). (Vide also "Arsenical Waters.")

(Extent, 15 acres.)

Hydrochloric acid (free)	..	..	..	3383.6
Pentathionic acid ..	..	..	..	16.8
Boron Trioxide ..	..	..	..	21.7
Aluminium sulphate	..	..	..	1476.3
Total solids ..	..	..	..	6469.6
Temperature ..	..	..	..	110° Fahr.

<i>Whale Island.</i> ™ (Pond.)				
Sulphuric acid	..	..	..	138·32
Total solids	..	..	..	250·30
Temperature	..	..	..	198° Fahr.

<i>Abbotsford, Otago (1882).</i>				
Sulphuric acid (free, and combined with iron)	..	..	..	191·87
Total solids	..	..	..	304·01

TAUPO.

<i>Rotokawa (Black Water).</i> ™ (Hector.)				
Hydrochloric acid	..	..	..	(Free)
Total	..	..	..	142·4
Temperature	..	..	..	192° Fahr.

<i>Rotokawa (Yellow Water).</i> (Hector.)				
Hydrochloric acid	..	..	..	(Free)
Total	..	..	..	176·0
Temperature	..	..	..	152° Fahr.

WAIRAKEI.

Practically all springs of the Kiriohinekei Valley are more or less acid: two are given as types.

<i>Devil's Eye-glass (1905).</i> (Vide also "Chalybeate Waters.")				
Sulphuric acid (free)	..	..	..	2·80
Carbonic acid (free)	..	..	..	7·10
Total solids	..	..	..	117·25

<i>The Boilers (1905).</i> (Vide also "Chalybeate Waters.")				
Sulphuric acid (free)	..	..	..	4·50
Carbonic Acid (free)	..	..	..	7·50
Total solids	..	..	..	100·77

<i>Sulphur Terrace, Waiotapu (1909).</i>				
Sulphuric acid (free)	..	..	..	2·5
Total solids	..	..	..	43·6
Temperature	..	..	..	212° Fahr.

CLASS III.—MUDDY WATERS.

There remains a subclass of the sulphur waters which consists of mineral water containing large quantities of highly siliceous mud in suspension. The importance of these waters lies in the fact that they are greatly utilized for mud baths.

Some of them contain free mineral acids, others are neutral, or only give an acid reaction from the amount of free carbonic-acid gas they contain. Typical examples of the former are the "Coffee-pot" and the "Cameron" Springs, and of the latter, the "Sulphur Point Mud Spring," all of Rotorua.

<i>Coffee-pot.</i>				
Sodium-sulphate	..	..	..	23·71
Hydrochloric acid (free)	..	..	..	7·66
Sulphuric acid (free)	..	..	..	7·60
Total	..	..	..	60·19

<i>Cameron.</i>				
Sodium-sulphate	..	..	..	44.54
Hydrochloric acid (free)	..	..	..	5.92
Total	..	..	..	80.50

<i>Sulphur Point (1906).</i>				
Sodium-chloride	..	..	..	80.85
Sodium-silicate	..	..	..	26.30
Carbonic acid (free)	..	..	..	14.90
Total	..	..	..	141.72

Below is given an analysis (1906) of the muddy deposit around this spring, from which, and from similar material, the mud baths of Rotorua principally are made. It consists mainly of silica, and is noticeable in containing both gold and silver. On account of its interest, I have given Dr. MacLaurin's analysis in full.

Silica	..	..	..	69.30
Alumina	..	..	..	4.52
Iron-oxides	..	..	..	2.00
Titanium-oxide	..	..	..	0.58
Lime	..	..	..	1.00
Magnesia	..	..	..	0.10
Soda and potash	..	..	..	1.30
Sulphur (combined)	..	..	..	1.40
Sulphur (free)	..	..	..	6.09
Organic matter	..	..	..	10.01
Water	..	..	..	3.70

"Microscopic examination of the deposit* showed that it consisted mainly of quartz and amorphous silica, with a little felspar. The mud also contains 5 grains of gold and 6 dwts. 1 grain of silver per ton."

ARSENICAL WATERS.

There are no springs containing arsenic used for therapeutic purposes in New Zealand. Several springs contain traces of arsenic, others again reputed to do so, such as the "Arsenic Spring" in the Spa grounds at Taupo, contain none at all.

There is one spring, however, so huge and so rich in arsenic as to completely dwarf all the arsenical springs of Europe put together. This is the hot acid lake on White Island, some 15 acres in extent (*vide* "Acid Sulphur Waters"). The waters are, however, so highly mineralized as to be unfit for either internal or external medication.

<i>EUROPE.</i>				
<i>La Bourboule.</i>				
Sodium arseniate	..	..	..	1.96
Total solids	..	..	..	448.00

<i>NEW ZEALAND.</i>				
<i>White Island Lake (1910).</i>				
Arsenious-oxide	..	..	..	3.92
Total solids	..	..	..	6469.65

Burton's, Taupo. (Hector.)
(Traces of arsenic.)

* "Suspended in the water."

MERCURIAL WATERS.

Certain of the muriated alkaline springs are turbid with mud containing varying amounts of mercury derived from the soil around, which is rich in this mineral.

While such can perhaps hardly be strictly classed as "mineral waters," the natural mixture of mineral water with mercurialized mud is obviously important from a therapeutic point of view, and is classed here for convenience.

Ohaeawai (1904). (*Vide* "Muriated Alkaline Waters.")

* Amount of mercury variable.

Temperature, 180° Fahr.

TABLE-WATERS.

This is another ill-defined group of waters, usually characterized by feeble mineralization, and by containing a large quantity of free carbonic-acid gas.

It is obvious that such a water may be classed under one or other of the previous headings according to the preponderating ingredients it may contain, and, as a matter of fact, most of the mineral waters used as table-waters in New Zealand are really so strongly mineralized as to justify the title of "medicinal," and almost all contain rather more iron than is consistent with an ideal table-water.

EUROPE.

Selters (Seltzer water).

A muriated alkaline water containing—

Sodium-chloride	..	..	..	140.0
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NEW ZEALAND.

Wairongoa (South Island). (*Vide* also "Earthy Waters.")

Calcium-bicarbonate	..	..	..	67.86
Magnesium-bicarbonate	..	..	..	35.89
Sodium-chloride	..	..	..	22.73
Sodium-bicarbonate	..	..	..	20.91
Sodium-sulphate	..	..	..	14.70
Total solids	..	..	..	165.75

Together with a large excess of carbonic-acid gas, which is bottled with the water.

Puriri. (*Vide* also "Alkaline Waters.")

This is a cold alkaline spring, temperature 60° Fahr., which is very freely used as a table-water, but which is so strongly mineralized that it should really be classed under the head of "Alkaline Waters."

Te Aroha. (*Vide* also "Muriated Alkaline Waters.")

The thermal waters of *Te Aroha*, cooled and artificially aerated, are also sometimes used as table-waters, but are so strongly mineralized as to really constitute medicinal waters.

There are also at *Te Aroha* several cold springs, feebly mineralized, pleasant to the taste, but somewhat deficient in natural carbonic-acid gas.

* Minute globules of mercury are easily discernible to the naked eye in the deposits alongside the springs

Cold "Magnesia" Spring (1902).

Calcium-bicarbonate	..	..	..	41.5
Magnesium-bicarbonate	..	..	..	23.4
Total solids	..	..	..	83.6

Kamo. (Vide also "Chalybeate Waters.")

These waters are tepid to warm, strongly effervescent with carbonic-acid gas, and pleasant to the taste.

Calcium-bicarbonate	..	..	..	57.68
Sodium-bicarbonate	..	..	..	38.64
Sodium-chloride	..	..	..	38.01
Total solids	..	..	..	164.36

Paeroa (1905). (Vide also "Chalybeate Waters.")

Tepid spring, temperature 80° Fahr., fair effervescence of CO₂, pleasant sweetish taste.

Magnesium-bicarbonate	..	..	..	73.0
Sodium-bicarbonate	..	..	..	39.4
Calcium-bicarbonate	..	..	..	35.5
Total solids	..	..	..	167.8
Free carbonic acid	..	..	..	26.0

GASES IN MINERAL WATERS.

Carbonic acid is present in a very large number of waters, but is especially noticeable in those of Kamo, where it is the chief therapeutic agent in the baths. It is also abundantly evolved in the "Priest" Spring, Rotorua, where it assists the stimulant action of the acid water on the skin.

Methane (marsh-gas) is exceedingly abundant in the iodine waters of the east coast, notably at Te Puia and Morere, where it is used for illuminating purposes, as also at Hammer in the South Island.

Nitrogen in small quantities accompanies the sulphuretted hydrogen in many waters.

Sulphuretted hydrogen is present in large quantities in the "sulphur waters," and in minute quantities in the majority of the springs.

Sulphurous acid is abundantly evolved through the soil forming the bed of many of the acid sulphur springs, and, coming in contact with sulphuretted hydrogen, is at once decomposed, with the formation of water and sulphur.

SPAS.

The vast majority of the springs in the above list are practically unequipped and almost unused.

In the central volcanic district, notably at Taupo and Wairakei, there are baths in connection with the hotels. These baths, however, are more or less primitive, and are suitable rather for the tourist than the invalid.

There are baths and hotel-accommodation also at Kamo, Waiwera, and Okoroire, and, in more primitive fashion, at Morere, Te Puia, Helensville, and Waingaro.

Hammer in the South Island, and Te Aroha and Rotorua in the North, are spas under Government management. Of these Rotorua is the largest and best equipped.

PART IV.—DESCRIPTIONS OF LAND DISTRICTS AND ANNEXED PACIFIC ISLANDS.

THE AUCKLAND LAND DISTRICT.

ERIC. C. GOLD SMITH, Commissioner of Crown Lands.

Introductory.

THE Auckland Land District covers about four and a half degrees of latitude, with an area of 13,858,000 acres, extending from 34° 30' to 39° S., its greatest length being about 365 miles, from the North Cape to the 39th parallel, south of Lake Taupo, while its greatest width is about 180 miles. In the peninsula north of Auckland, indented as it is on either side by harbours and arms of the sea, and with a mean width between the Pacific Ocean and Tasman Sea of little over forty miles, the range of temperature is remarkably small. The thermometer seldom registers above 80° in the shade in the middle of summer, whilst the heat is always tempered by a cool breeze, bringing the mean summer temperature to under 70° in the shade. The frosts are hardly worth mentioning, as the minimum register is seldom below 40°; but south of Auckland sharp white frosts occur very often, more especially below 38° of latitude, and snow lies upon the summits of some of the highest hills or mountains in winter.

Physical Features.

This land district may be said to have no real mountains, as the most prominent peaks of the several scattered ranges or hills seldom exceed 3,000 ft. in height above the sea-level, an altitude just enough—south of 38°—to clothe the last 1,000 ft. with snow in the depth of winter. North of Hokianga and the Bay of Islands there is one well-defined range of hills rising to a height of 2,463 ft.; whilst south of these places, and extending to the Wairoa River on one side and the Waangarei Harbour upon the other, the country is all more or less broken into ranges from 1,000 ft. to 2,000 ft. in height, with valleys between. The next really well-developed main range lies within the Coromandel and Thames Peninsula. With a length of over 150 miles, it has an average height of over 2,800 ft., commencing with Moehau, or Cape Colville, 2,935 ft.: next, Te Aroha, a peak of 3,176 ft.; and ending at Weraiti with a height of 2,527 ft. There are two other well-defined ranges—namely, Tawairoa and Hauturu—lying between the west coast and the Waipa basin, with their highest peak at Pirongia, which rises to 3,156 ft., and is often snow-capped. There are other ranges forming the watershed between the basins of the Waikato and Waipa Rivers, and dividing both from the streams running into the western side of Lake Taupo. Their highest peak is Pureora, rising to 3,793 ft. The eastern side of the land district is occupied by a very broken, forest-clad country, known as the Urewera country, the average height of which is about 2,500 ft. This has been reserved for the Natives. To the east of Lake Taupo lie the Kaimanawa Ranges, of about 4,500 ft., and generally open on the ridges, with valleys clothed in beech forests. Nearly the whole of the Auckland Land District is indented on both coasts with harbours and arms of the sea, forming a cheap and easy means of access. Of rivers, properly so called, there are only two of any great length—namely, the Wairoa and Waikato. The first empties itself into the Kaipara Harbour, a large arm, or rather succession of arms, of the sea, giving hundreds of miles of inland water-carriage to all parts of the Counties of Hobson, Otamatea, Rodney, and Waitemata. This river is navigable from its mouth to its junction with its tributaries Wairua and Mangakahia, a distance of ninety-one

miles from the sea, and for forty miles it is navigable for ships of large burden. The River Waikato has a course of 200 miles, measured from its source in the Ruapehu Mountain through Lake Taupo to the sea on the West Coast. It is navigable for river-steamers for seventy-five miles from its mouth, and its tributary, the Waipa, for twenty miles from its confluence with the Waikato at Ngauruahia. Another river — the Thames, or Waihou—though of no great length, affords a valuable means of inland water-carriage, and is navigable for small steamers for twenty-five miles. Generally speaking, every part of the district has an abundant water-supply, now and then lessened for a short time at the end of a very dry summer.

Plains.

Of plains proper, this district has only the stretch of country called Kaingaroa, extending from the eastern side of Lake Taupo towards the Bay of Plenty, all more or less of a pumice formation; the valley of the Thames, and the delta between the Thames and Piako Rivers, also the Hauraki or Piako Plains, which extend right down to the Hauraki Gulf. The country is generally level; the quality of soil varying very much in different parts. Works of considerable magnitude have been carried out under the Hauraki Plains Act, 1908, in draining and rendering fit for settlement a Block of 90,000 acres of those plains. This scheme is under the general supervision of Wm. C. Kensington, Esq., I.S.O., Under-Secretary for Public Works, while the work of construction is carried on under the direction of Mr. Thomson, C.E. A canal, fifteen miles in length, extending from the Piako River near the Maukoro Block to the Waitakaruru River (which latter has been straightened and deepened) is in course of construction, and a township has been laid off at the mouth of the river. The canal has been primarily opened along its entire length by a drain 9 ft. wide at surface, 6 ft. wide at base, and 3 ft. deep, which will be enlarged as the works progress. Up to 31st March, 1911, 211 miles 69 chains of drains were constructed. Stop-banks in the lower Piako River to prevent spring tides and flood combined from over-flowing the land, made dry by the canal and drains, have also been constructed, and two specially constructed Priestman dredges are kept continually at work, one at the end of the canal emptying into the Waitakaruru River, and the other at the Maukoro end of the canal, fifteen miles distant. Eight flood-gates have been erected, and two more are to follow. Two wharves have been constructed, and two more are in course of construction. About a hundred men have been employed on the work; the numbers fluctuate according to requirements. The amount expended during the past year was £29,607, and the sum expended from 1908 to 31st March, 1911, is £63,514. Snags and logs in great numbers have been removed from several miles of river-beds, and in some instances the rivers have been straightened, widened, and deepened. The canal and drains, when completed, will convey and give quick discharge from the flood-waters and Waitoa Rivers into the Hauraki Gulf, and generally will prevent flooding from creeks and watersheds of ranges. That the expenditure incurred in carrying out these works was justified has been proved beyond the shadow of a doubt by the great demand for the land by practical farmers and by the successful sale at the first ballot for 16,299 acres of the block offered on the 18th May, 1910. It is also quite clear that, when finished, the works will materially benefit not only the Government lands, but also all low-lying land abutting the Waitoa and Piako rivers and their tributaries. Another area has lately been leased, and the remainder of the block will be disposed of in suitable areas at such periods as the lands are rendered fit for occupation by the works in progress. In the meantime in addition to the drainage and other works a number of roads are being formed throughout the block. The success attending this scheme will no doubt lead to other swamps which have lain useless for ages being drained and rendered fit for settlement as circumstances require.

Here and there in the North there are level plateaux of volcanic soil, more or less densely wooded, and along the main rivers there are stretches of level country, but there are no large plains of alluvial soil such as the South Island can show.

Lakes.

Of these, which add so much to the scenery of a country, this district possesses a fair share, there being eight principal lakes, with some twenty or more smaller ones. To the north of Auckland, in the Bay of Islands district, there is only one lake of any size, called Omapere, three miles by two miles, an old crater. In the Waikato are Lakes Waikare and Whangape, the first six miles and a half long by three miles across, and the second five miles by one mile. These lakes are generally frequented by numerous wild swans and ducks, and, being both connected with the Waikato River by navigable creeks, form a convenient waterway for transport of goods to settlers living around their shores. All the remaining lakes of large size are within the watershed of the Thermal-springs District, and are mostly from seven to eight miles long, and from three to six miles wide, except Taupo Moana, the queen of the North Island lakes, which is twenty-five miles long and eighteen miles broad, with a depth of 500 ft. The scenery round its western shore is of the most romantic kind.

Forests.

The greater part of the Auckland Land District has been covered in the past with dense forests, which are now fast disappearing under the axe of the settler and the sawmiller, and being transformed into rich pasture-land. The greater portion of good Crown lands fit for settlement in the North are still all covered with forest, and must be cleared and sown before any returns can follow. The area of forest land in the Auckland District at the present time is estimated to be about 926,250 acres north of Auckland, and 2,652,000 acres south of it, or $2\frac{1}{2}$ per cent. less than last year. The forests contain a mixture of trees of all kinds, from the giant kauri to scrubby tea-tree or manuka, but all the bush is useful for building, fencing, and household purposes, or at any rate may be converted into charcoal for sale. Of kauri (the most valuable tree in New Zealand) great quantities are yearly being cut and exported or used for home consumption, but, owing to the fact that this timber is rapidly disappearing, and the increasing demand, the prices have risen considerably, and kauri is now used, generally speaking, in the construction of the more important parts of buildings only. With a view to extending the period of usefulness of the kauri, only limited quantities are disposed of by the Crown from time to time.

Soils.

With respect to the soils of Auckland, nowhere in New Zealand within such short distances is there such a diversity in the quality—a distance of half a mile often makes all the difference between rich alluvial and barren pipeclay. To the north of the Bay of Islands and Hokianga the lands are chiefly clay and sandstone, with here and there a volcanic area intervening. In and about the valley of the Mangonuiowae River, in the Hokianga County, there is some of the richest alluvial soil in the district. Between the Hokianga and Bay of Islands Harbours there are large areas which will carry good grass and feed one or two sheep to the acre, after clearing and laying down in grass; and there is also land highly suitable for fruit-growing. South of Hokianga, and between that place and the Wairoa River, the soil is, generally speaking, very good, being both volcanic and alluvial. Immediately south of the Bay of Islands, and extending thence to Whangarei, the soil is, for the most part, clay lying upon sandstone or marl, with alluvial flats in the bottoms of the valleys; but these are, as a rule, very narrow. Within the Puhupuhi State Forest there is an area, say, of 16,000 acres, more or less, of volcanic soil. Approaching Whangarei, at Hikurangi, the limestone crops out, overlying coal-deposits, and round Whangarei itself the soil becomes a rich volcanic, in a high state of cultivation. South of Whangarei Harbour, and from thence to Auckland, the Crown lands generally are of a broken character, with soil varying from alluvial swamps—as in the case of the Tokatoka Swamp of 16,000 acres—to the limestone areas round Maungaturoto, the sandstone and clay lands of Rodney County, and the poorer clay lands lying north of the City of Auckland, which have, however, proved eminently suitable for fruit-growing.

For about 200 miles south of Auckland the land (with the exception of the Cape Colville Ranges) is, generally speaking, far less broken, and gradually opens out into large tracts of level country in the Waikato and Waipa basins. Immediately south of Auckland the soil is rich volcanic until it is gradually superseded by the prevailing clays; the greater portion of Manukau County, for thirty miles south of Auckland, may be classed as pastoral, and is under occupation as such. The Crown areas available for early settlement—say, 4,000 acres—are chiefly in the Koheroa and Otatau Parishes, varying from volcanic clay to ordinary clay land, forest-clad, and well adapted for pastoral purposes. In the Counties of Waikato, Raglan, Waipa, Piako, Matamata, West Taupo, Kawhia, Waitomo, and Awakino, there is a still greater diversity of soils. Raglan County contains large areas of good limestone country, broken, but with rich black soil, and carrying most luxuriant grass. The lower Waikato country consists of clay soil and extensive swamps, almost undrainable, but at a distance of eighty miles from Auckland is found a flat and undulating country, lying partly within the Waikato and Waipa basins, and partly within the valleys of the Piako and Waikou Rivers, formed mainly of alluvial deposits of rhyolite sands brought down from the volcanic districts. In the Kawhia, Waitomo, and Awakino Counties there is a large area of excellent limestone land, a considerable portion of which is heavily timbered, with numerous warm valleys. Most of this land has now been acquired by the Government from the Native owners, and has been taken up by a good class of settlers. Negotiations are proceeding for the acquisition of further extensive areas in Thames, Ohinemuri, Waitomo, Awakino, Kawhia, and West Taupo Counties. Beyond this there is a large stretch of country consisting alternately of open valleys and forest-clad hills, a fair proportion of which is good land, both pastoral and agricultural. At Te Kuiti extensive kilns have been erected for the supply of burnt lime for agricultural purposes. The industry is flourishing, being well supported by farmers in the surrounding districts. The County of Coromandel, with portions of Thames and Ohinemuri Counties, is chiefly devoted to the mining industry. The soil is nearly all clay, the land very broken, but suitable for pastoral purposes if cleared of the dense forest that now covers it. The western portion, however, of the Thames and Ohinemuri Counties contains large areas of alluvial and swamp lands, now in the hands of the Crown, and available for settlement as drainage operations progress.

In the County of Tauranga, the clay lands extend from Te Aroha Mountain to Katikati entrance, changing, near Tauranga, to sandstone and black pumice soil of rich character, which improves towards Te Puke and Maketu, where the land is all good, and more or less volcanic. In Whakatane and Opotiki Counties there are very extensive swamps, of which large portions are drainable, and back from the coast seven miles or so are large areas of Crown lands, broken and forest-covered, opened ready for settlement. The soil is chiefly clay or light loam, with alluvial flats in the valleys, and all well watered. This kind of country extends to the boundary of the land district. The coastal lands are nearly all alluvial flats in a high state of cultivation, and the settlers mostly well-to-do.

Roads giving access to back-block settlements in various parts of the district are being vigorously constructed and many old road lines abandoned in favour of new deviations, which provide an easier and better grade.

Review of Soils: Uses and Returns.

Briefly to set forth the capabilities of the Crown lands in the district, it will suffice to say that north of the Bay of Islands and Hokianga the land is suitable chiefly for two classes of persons—the gum-digger, and the fruit-grower or small farmer. The former has the range over large areas of Crown lands upon paying a small fee, and his earnings average from 5s. to 10s. a day. As for the latter, in and around Hokianga, with its 250 miles of water-frontage, almost anything can be grown. The soil is well adapted for the cultivation of grapes, and an excellent wine is being manufactured at Kohukohu. Oranges and lemons flourish side by side with all kinds of apples, pears, and plums. Wheat does fairly well and maize gives a return of 50 to 60 bushels an acre. Sheep also thrive;

and most of the lands, when properly grassed with imported grasses, will carry two or three sheep to an acre, but ordinary rough-grassed lands only one and a half to two sheep per acre. The clearing of forest lands, ring-fencing and grassing them, will cost about £3 to £3 10s. per acre. The same remarks apply to the Bay of Islands and Whangarei, and to the country as far south as Auckland. Round about Whangarei district, and under similar conditions of culture, the average return for good agricultural or pastoral lands would be fully 12s. an acre per annum. South of Auckland, throughout the Waikato, Piako, Waipa, Matamata, and Raglan Counties, and thence south to the district boundaries, the land is both agricultural and pastoral. All the cereals do well, wheat averaging 27 to 30 and up to 40 bushels per acre, and oats 26 bushels per acre. Potatoes average from 5 to 7 tons per acre. Dairy-farming is carried on, yielding (upon well-cultivated farms) a net profit of 15s. to 20s. an acre per annum; whilst sheep-farming yields a profit of from 5s. to 7s. 6d. a sheep per annum on very large estates; allowing for greater losses from disease, &c., the average return would still be 4s. per sheep. The cost of clearing fern and scrub is generally from 7s. to 10s. an acre, and laying down fern land by surface-sowing and harrowing, about 17s. an acre.

The seaward counties of Tauranga, Whakatane, and Opotiki are both agricultural and pastoral, growing wheat and maize alike to perfection, without indicating any perceptible deterioration in the soil. In fact, these counties, upon their alluvial shores and uplands, grow the greater portion of the maize produced in the district, and from the ports of Whakatane and Opotiki in one year some 34,000 sacks have been exported. In these counties the average yield of wheat is from 22 to 25 bushels per acre, oats about 29 bushels per acre, and maize 45 to 60 bushels per acre. It is quite possible within this district to select land early in the winter, fell and burn off by the ensuing summer, sow in grass in the autumn, and put on stock within twelve months from selection. Large areas remain to be opened in the future, and when the swamp lands are systematically drained the climatic conditions are such that no more productive soil will be found to exist in the Dominion either for agricultural or flax-growing purposes.

Rainfall.

The rainfall during the year averages about 39 in., the greater portion of which as a rule, falls between the 1st of May and 1st of November, or during the winter and spring months. Owing to the constant changes of wind, caused by the configuration of the coast-line, the shortness of the distance between the two coasts, and the influence, greater or less, of the trade-winds, it is quite common for one neighbourhood to have double the rainfall of another, even though the two be only twenty miles apart. Droughts of more than a couple of months are practically unknown, and grass is always abundant.

Winds

One of the chief means whereby the great healthiness of the climate is maintained is the constant presence of fine breezes, blowing both summer and winter, the prevailing winds being north-east and south-west, and very seldom passing into really heavy gales. In the middle of summer, the sea-breeze during the day and the land-breeze at night are almost unvarying.

Chief Centres and Surrounding Districts.

The City of Auckland lies on the southern shore of the Waitemata Harbour one of the finest havens in the Dominion, on a narrow neck of land between the Waitemata and the Manukau. Alike from the sea and from the neighbouring hills, the city and surrounding country presents a charming picture. Especially fine are the views obtainable from Mount Eden, a volcanic hill some 644 ft. above sea-level, and from One-tree Hill, both situated in the suburbs. These places are also points of historic interest, inasmuch as they were held as strongholds during the Native tribal wars. A favourite drive is that through Cornwall Park, in the vicinity of One-tree Hill. Facing the city are the green hills and white

houses of the North Shore, and the remarkable island peak of Rangitoto; beyond lie the many islands of the Hauraki Gulf, with the blue hills of Coromandel and the Great Barrier in the far distance. Clustered near the foot of the hill, and scattered for many miles to the southward, are charming villa residences, with tasteful gardens and shrubberies, while to the north-west the view is closed by the high-wooded Waitakerei Ranges. Auckland possesses two docks, the larger (Calliope) on the North Shore, where massive machinery has been installed, which will render the dock of use to the Admiralty as an auxiliary naval depot. Other extensive harbour improvements are in progress, such as quays, berthing and storage accommodation for ocean-going vessels, &c. The principal material employed in this connection is reinforced concrete, and when these works are finished the shipping facilities of the port will be unsurpassed in the South Pacific. The city has an excellent commercial position; it has communication by sea with both sides of the Island, while the Kaipara and Wairoa Rivers leading far into the northern peninsula, and to the south the Waikato and Thames Rivers leading into the heart of the Island, give it natural facilities for inland communication. The latest estimate gives the population of the city and suburbs as 102,676. The city is well supplied with electricity, gas, and water, and amongst public buildings may be noticed Government House, the Government offices, post and telegraph offices, Supreme Court, &c. There is a free public library and art gallery, which contains the Grey collection of ancient manuscripts and examples of art by world-famous painters, and a good Museum possessing what is probably the best Maori collection in the Dominion. The Auckland University College is affiliated to the New Zealand University. There are several fine buildings included amongst the places of worship. A commanding view of the city is obtainable from the tower of St. Matthew's Church.

The Victoria, His Majesty's and Strand Arcades (the latter was burnt down, but is now erected on a larger scale than before), the Exchange, Harbour Board offices, banks, hotels, and clubs, as well as many commercial buildings, compare favourably with those in other parts of the Dominion. Within the past few years many fine warehouses, &c., have been completed, showing evidence of the rapid development of trade. A town hall is in course of construction, also a technical college, a new chief post-office, new railway-station and buildings, harbour ferries offices, and several other large structures, while a ferro concrete bridge, noted for the length of its span, crossing the "Cemetery Gully," has been completed, thus joining the eastern and western portions of the city. There are admirable recreation-grounds, including the Domain of about 180 acres, as well as the Botanic Gardens, the Albert Park in the centre of the city, the Western Park, and Victoria Park at the west end bordering upon the harbour. There is an electric-tramway system extending through the city and suburbs, and a good ferry service to the marine suburbs of Devonport, Northcote, Birkenhead, Chelsea, and St. Helier's Bay. Comfortable and up-to-date workers' dwellings have been successfully established at Ellerslie, to which place there is an excellent tram service, and advantage has also been taken of the workers' hamlets, set apart by the Government along the Kaipara Railway-line, a few miles from the city, which enables workmen to acquire holdings of a few acres within a reasonable distance from town. Auckland has numerous industries, including, amongst others, ship-building, sugar-refining, timber-converting, sash and door manufactories; rope and twine, pottery, brick and tile, varnish works; printing-offices, &c. The oversea trade of Auckland is large and rapidly increasing. During the year 1910 the imports into the port of Auckland were valued at £4,741,826, and the exports at £3,960,655.

The City of Auckland is the centre from which radiate all railways, road, and steamer routes. From it, by rail, lies the way to all Crown lands. All lands to the north and along the Bay of Plenty are reached from its wharves by the Northern Company's steamers. The chief centres to the north are:—

Warkworth, on the East Coast, forty-three miles from Auckland, with communication by train and coach from Wayby, and by steamer. It is a thriving township, with post and telegraph office, public halls, hotels, &c. It is also the site

of important hydraulic lime and cement works. A good deal of agricultural and pastoral farming and fruit-canning is also carried on with success in the neighbourhood.

On the West Coast an important centre is Helensville (population 670), on the Kaipara Harbour, distant thirty-eight miles from Auckland, with which it is connected by rail. Besides possessing fine mineral and hot springs, opened in June, 1907, it has for public purposes, conveniences required by travellers, such as hotels, stores, &c., and is the starting-point of the river-steamers running to all places in the Otamatea and Hobson Counties. It is also one of the main centres for the export of balm timber.

In the north of the Auckland Province, railway communication has recently been extended to Te Hana, an arm of the Kaipara Harbour, and construction-works are in progress beyond that point. The line will eventually be carried up the Mangakapia Valley, about the middle of the Island, and will probably pass close to the Township of Kaikohe.

Dargaville, on the Wairoa River, which is at this point a mile wide and navigable for vessels of 20 ft. draught, is a town of 1,291 inhabitants, with conveniences for travellers. It may be reached by rail and steamer from Auckland almost daily. Dargaville is the starting-point of the Kaihu Valley Railway, which is open for traffic for seventeen miles from the town, and from the terminus of the railway all the Crown lands in the neighbourhood are reached, even so far north as Hokianga. The town is also the centre of a very large timber and kauri-gum export trade. The National Park at Kaihu contains some of the finest specimens of kauri-trees to be seen in the north. There are only two townships on the west of any importance north of Dargaville—Port Rawene (or Hokianga) and Kohukohu, where the sawmilling industry is extensively represented. Both have post and telegraph stations, and hotels, with fortnightly steam-communication from Auckland and a weekly coach to the Bay of Islands, thence by steamer to Auckland.

Whangarei, on the East Coast, possesses an excellent harbour, advantage of which is taken by small steamers and other coasting craft in stormy weather. It is distant ninety-five miles from Auckland, with which it has steam-communication three times a week. The town is a thriving and important place, lighted by gas, having a population of 2,664, and is the centre of an agricultural and pastoral country. About ten miles by rail from Whangarei is Hikurangi, where a large coal-mine is worked, adjacent to which is a gum- and timber-producing district. The remarkable limestone formation known as the Waro Rocks is within easy distance, whilst the Great Wairua Falls and the Whangarei Falls in the vicinity are worthy of notice. At Kamo, the hot and cold mineral springs are largely availed of by those suffering from rheumatism and kindred complaints. First-class accommodation is obtainable here. Oranges and lemons thrive magnificently on the rich volcanic soil, and the export of these fruits is on the increase. From Whangarei, all lands within a radius of thirty to forty miles may be visited by horse, carriage, or rail. Opau Wharf, about three miles south is the present commencing-point of the railway-line passing through Whangarei and Kamo to Hukerenui, a distance of about twenty-three miles. This line will ultimately join that at present being constructed in a southerly direction from Kawakawa, and through communication is expected to be established about the end of the current year. Railway-formation is being pushed on. A bridge has been built over the Whangarei River, and the railway from Opau Wharf to deep water at Grahamtown, three miles distant, where a new wharf is being built, will be completed within a year. There are several dairy factories in the district, and fruit-preserving is carried on successfully.

Kawakawa, at the head of the tidal portion of the river of the same name, is connected by a short railway-line with Opua, the calling-place of steamers from Auckland. Kawakawa possesses good inns. From it coaches run weekly to Hokianga and Hukerenui. It is the centre of a coal and gum industry, and a port of loading for those products. The old town of Russell (formerly Kororareka) is situated further down the bay, and has a good hotel, besides having a post and telegraph office. To Whangaroa, Mangonui, Awanui, Hohoua, and Parenga-

renga, the Northern Company's steamers run every week, Whangaroa is the centre of a large timber and gum export trade. Recently considerable attention has been directed towards the development of extensive copper deposits in the locality, and a systematic geological survey has revealed the existence of valuable minerals, the working of which, it is confidently hoped, will give a greater impetus to the progress of the district in the near future. Whangaroa Harbour is famed for its beauty, and the surrounding scenery has proved most attractive to tourists and travellers. Mangonui is the starting-point and centre from which to visit, by carriage or horse, all the Crown lands in the Mangonui County.

South of Auckland, along the Waikato Railway, there are numerous townships of more or less importance, but no starting-point for Crown lands until Mercer is reached at a distance of forty-three miles. It is situated at the borders of what is known as the Waikato country, upon the Waikato River, which is tidal up to this point, and the township has a post and telegraph office and other conveniences. At sixty-five miles from Auckland by rail is Huntly, also on the Waikato River, a flourishing township, with a large output of valuable coal. It has also pottery, brick and tile works. On the opposite side of the Waikato River large areas of Crown lands are being brought into use, and are carrying numbers of sheep and cattle. The next town is Ngaruawahia, or New-castle, seventy-four miles from Auckland, situated at the junction of the Waikato and Waipa Rivers, with hotels, bank, post and telegraph office. It is a centre from which portions of Crown lands in Raglan County are reached, and also from it river-steamers run north and south to the various settlements. Ngaruawahia has a flourishing butter-factory, a brewery, and a cooperage. At eighty-five miles from Auckland the train reaches Frankton Junction, where lines branch off to Hamilton, Cambridge, Te Aroha, Paeroa, Thames, and Rotorua, the main line going through Te Awamutu, 100 miles from Auckland. The North Island Main Trunk Railway now connects the Cities of Auckland and Wellington, which are 426 miles apart, by the railway route. Its construction was begun in 1880, but was hindered for some time on account of difficulties experienced in obtaining the consent of the Maori landowners to the survey and location of the portion of the line which traverses what is known as the King-country, for many years closed to settlement and to white travellers. The Natives having finally been won over to a more friendly attitude, construction-works were resumed in earnest in 1885, and the line was sufficiently completed to enable a train to come through from Wellington during the American Fleet week celebrations in July, 1908, and was opened for traffic on 18th February, 1909. On account of the mountainous and rugged nature of most of the country traversed the construction of the line has been a laborious and somewhat costly undertaking, presenting numerous engineering difficulties and necessitating much resource and endurance on the part of the officers responsible for the practical work. The railway traverses some magnificent country, rich in mountain, river, and gorge scenery, and giving much promise as a field for settlement and industry in the future. There are many creditable engineering achievements on the line, notably, the Makohine, Makotote, and Hapua-whenua viaducts, all built of steel, and of great height and bold design; the peculiar spiral at Raurimu, where the line doubles back on itself to negotiate a sharp rise from the Whakapapa Valley to the Waimarino plateau, numerous tunnels from a few yards up to 63 chains in length, and large and small bridges crossing the many streams and rivers traversed in the well-watered districts served by the line. The line has been substantially built right through, and the total cost of the 210 miles from Marton to Te Awamutu has reached the neighbourhood of £3,000,000.

Te Awamutu is a thriving town, and is especially English-looking with its nicely cultivated fields and well-kept hedges. The soil is well adapted for wheat growing, and this cereal is largely cultivated, the quality commanding the best market prices. Sheep and dairy farming are carried on extensively, and the cheese and butter factories find employment for a large number of hands. Flax-milling, brick-making, and other smaller industries flourish. The population of Te Awamutu is 645. The district possesses many spots of historic interest

owing to the fact that several desperate encounters with the Natives in early times took place within its borders. Comfortable homesteads now for the most part indicate the scenes of bygone struggles for the settlement of the country. Taumarunui is the point where the Wanganui River traffic connects with the northern railway system, and is becoming in consequence of this a regular tourist resort. Taumarunui is also an important Native centre.

Hamilton is a busy, flourishing town, situated on both sides of the Waikato River, with a population of 3,542 persons, and is the centre of an agricultural and pastoral district. The town is lighted with gas, and electric light is also utilized by some of the private business concerns. Besides the Post-office Savings-Bank, the Bank of New Zealand, Union Bank of Australia, and the Bank of Australasia are represented. Two well-established newspapers—the *Waikato Times* and *Argus*—have a large daily circulation in Hamilton and surrounding districts. There are several schools (State and private), library, hospital, waterworks, recreation-grounds, parks, &c. Hamilton West is drained on the septic-tank system, and the town is, generally speaking, most up to date in the matter of improvements. Hamilton possesses dairy factories, creameries, flax-mill, brewery, and two soap-factories, besides other local industries. Cambridge, about thirteen miles by road and fifteen miles by rail from Hamilton, has a population of 1,463, and is the headquarters of the Farmers' Club. It is a busy, thriving township, surrounded by good farming country. At Maungakoua, seven or eight miles from Cambridge, the Government has established an institution for consumptives, known as Te Waikato Sanatorium. The site is in the ranges, at an elevation of about 1,000 ft. and the climate is well suited to the treatment of pulmonary complaints. Between Hamilton and Cambridge, and in the country round, there are numerous creameries, cheese and butter factories. Wine and cider making are also successfully pursued, and there are several apiaries, from which large quantities of honey are produced.

One hundred and fifteen miles from Auckland by rail is Te Aroha, a quiet township, celebrated for its thermal springs and medicinal mineral waters, with good hotels. The population is 1,298. Another thirteen miles brings the traveller to Paeroa, a centre of mining industry—whence a branch line twelve miles and a half long connects with Waihi (population 6,436), a gold-mining town—and in another twenty miles the Thames Borough is reached.

The settlements at the Thames and Coromandel are essentially mining townships. The first is situated forty-two miles by steamer from Auckland, on the Firth of Thames, and at the mouth of the Waihou River. It has a population of 3,591 persons. There is daily rail and steam communication with Auckland the railway also connecting it with Paeroa, Te Aroha, Waihi, Rotorua, &c. Coromandel is about thirty-five miles from Auckland, with which it has constant communication by steamer; it is another mining centre, situated at the head of a picturesque harbour. Tauranga, with a population of 1,346, is situated on the very fine harbour of that name in the Bay of Plenty. Coaches run thither from Waihi, and from Rotorua; it has also constant communication by steamer with Auckland, and with Matata, Whakatane, and Opotiki. From the fact of the harbour being the only one on the east coast between Coromandel Peninsula and Gisborne capable of receiving large vessels, the town is bound to be of importance in the future. Tauranga will ultimately be connected with the Auckland and Gisborne railway system. Construction-work has been commenced on a section towards Te Puke, a survey has been made for a line from Waihi to Tauranga, and some trial work continued eastward from Te Puke in the direction of the Bay of Plenty.

The excellent soil in the vicinity establishes beyond doubt Tauranga's claim to be one of the most fertile agricultural districts in the Dominion. The place has many historic associations, the famous "Gate Pa" and "Te Rengarenga," where the British troops met with serious disasters at the hands of the Natives, is within easy distance of the town.

Opotiki, with a population of 936, is the second town of importance in the Bay of Plenty, and is situated about eighty miles by steamer or road from Tauranga, or 226 miles south-east of Auckland. It has weekly steam-communi-

cation with Auckland, and may be reached *via* Rotorua and Te Teko by coach. It is also connected with Gisborne by means of bridle-track, road, and for part of the distance (Gisborne to Puha, twenty miles) by railway. Opotiki is the headquarters of the maize-producing district, and has rich alluvial lands, from which good returns are obtained. A considerable area of the more mountainous country has already been cleared of bush, and now carries successfully numerous sheep and cattle. It is a starting-point from which large blocks of Crown lands suitable for pastoral purposes may be reached.

The Town of Rotorua is situated on the southern shore of Lake Rotorua at an elevation of 915 ft. above sea-level, and 171 miles distant from Auckland by rail. The climate is bracing without being too cold. It is well lighted with electricity, and contains a number of hotels and boardinghouses, and the accommodation is excellent. The *permanent* population is estimated at 2,390. There is daily railway communication with Auckland, and during the summer months the number of trains are increased to cope with the great inrush of tourists and visitors from all parts of the world. This *floating* population is variously estimated at between 2,000 and 3,000. The streets of the town are planted with trees; the public gardens are well kept and beautiful. Several new houses and public buildings have lately been erected, the chief of which is the new Sanatorium. It is a large building, stretching north and south 320 ft., standing on an elevated terrace, approached by a carriage-drive, well fitted with the most modern requirements. There is a resident medical officer, who is also a highly qualified balneologist. There are hot swimming-baths for ladies and separate swimming-baths for gentlemen, cold showers, hot douches, sulphur and vapour baths; also numerous private baths, and special baths for special cases. The waters of many of these baths differ from each other in some constituent. There are well-appointed dressing-rooms and a luxurious cooling-room. This Sanatorium is unique in its surroundings, and is far and away the best spa of its kind (thermal) in the Dominion, or, in fact, in the South Pacific. The town has the usual post-office, bank, courthouse, town hall, library, churches of various denominations, and a tourist inquiry office, &c. The lake—seven miles and a half long by six miles in breadth—is stocked with trout, which afford magnificent sport.

The Town of Taupo—distant from Auckland about 227 miles south, reached from Auckland by rail to Rotorua 171 miles and thence by coach fifty-six miles—is situated at the north-east extremity of Lake Taupo. Its principal buildings are two hotels, a post and telegraph office, a police court, a store, a bakery, &c. There is also a “spa,” with several baths of different kinds in separate buildings, and good accommodation is available for visitors.

The “Crow’s Nest” Geyser is about ten minutes’ drive from the post-office. The famous Huka Falls are in close proximity, also the Aratiatia Rapids. Wairakei Valley, the most wonderful and beautiful portion of all the thermal districts in the Dominion, is situated about three miles from the town, and contains no less than eleven active geysers erupting, one constantly, others from four minutes and a half regularly to two hours and twenty-five minutes, while yet again others are irregular in their action. The Kui-o-binekai, a hot stream which flows from the Blue Lake with a temperature of 100° is also seen at Wairakei. The Town of Taupo, though small, is of importance. It is the headquarters of a motor-launch service by which tourists to the Taupo district are conveyed to the various places of interest, including the trout-fishing streams, the various parts of Lake Taupo, right down to Tokaanu at the extreme south-west part of the lake twenty-five miles distant, where lie the volcanic mountains of Ngauruhoe (an active volcano), Tongariro, and Ruapehu. The finest sight at Taupo is the lake itself, a magnificent sheet of water twenty-five miles long by eighteen miles wide, where large and heavy rainbow trout are found in great numbers. A five-year-old trout in good condition weighs 20 lb., with a length of 33 in. and a girth of 24 in. These fish rise readily to the fly, and sportsmen from all parts of the world are to be found at Taupo and the Thermal district generally during the fishing-season. At the western bay of the lake are to be seen many pretty waterfalls, bays, and high cliffs towering above the water for over 1,000 ft.

The Borough of Te Kuiti (population 1,266), on account of its position on the line of the Main Trunk Railway, has made rapid progress within the past two or three years. Besides possessing a dairy factory, first-class stores, a newspaper (the *King Country Chronicle*), and a library, all trades are represented. The demand for lime for fertilizing purposes is supplied by modern kilns locally. The Railway Department, having taken into consideration the growing importance of the township, have erected larger and more commodious engine-barns. New Government buildings, including a courthouse, have also recently been erected. The Roads Department have constructed a large number of bridges and formed and metalled many miles of roads and tracks throughout the district.

The Rohe Potae (King-country) generally is destined within the next few years to become a closely settled and prosperous locality. It is capable of great development, and what were formerly extensive bush areas are rapidly undergoing conversion into productive and remunerative farms. Several large areas of both bush and fern land have been leased by Europeans from the Natives. These lands are being rapidly cleared and grassed, and are now carrying large flocks of sheep and cattle.

At Te Rau-a-moa a dairy factory has for several years been established with success, and the settlers are much encouraged by the excellent results achieved, aided by the Government efforts to eradicate the noxious ragwort by stocking the affected area with sheep.

Oparau, the starting-point of coaches for Pirongia and Te Awamutu, on the Kawhia waters, has a timber-mill, and another is proposed to be erected shortly at Marakopa. The flax industry is also represented here.

A tender trades between Marakopa, Aotea, and Kawhia collecting produce and distributing goods for the Northern Steamship Company's regular west coast steamer. At Oparau, Hauturu, and Kinohaku small settlements have sprung up, each being landing-places for the settlers' goods. The Government have constructed a wharf at Kawhia, and the town is approached by a good bar harbour. A number of motor-launches ply for trade between Kawhia and the numerous settlements around the harbour.

Native lands for the most part are washed by the Aotea waters in this locality, but the Crown land at the northern end of the Moerangi Block is settled, and has a promising future. This part of the Kawhia County is much better served from Te Mata and Raglan.

Te Mata is situated at the eastern foot of Karioi, and has made considerable progress during recent years. The town possesses a school, post and telegraph office, telephone bureau, a fine hall, and a very successful co-operative dairy factory. In the Kaurua Valley close by there is another dairy factory.

The port of Raglan has several wharves and goods-sheds, and besides being served by weekly steamers there is a tri-weekly coach service with Hamilton, and also a similar bi-weekly communication with Ngaruawahia, via Waingaro Hot Springs. Te Akau Block, which has recently been acquired by the Crown from the Native owners, consists of some 13,000 acres, and adjoins the Whaingaroa Harbour. Raglan contains quite a fine fleet of motor-launches, has two churches, public hall, courthouse, library, two first-class hotels, a timber-mill, several flax-mills, and a newspaper (the *Raglan County Chronicle*). The northern portion of the county, which is almost wholly settled, bears the reputation of being the second best sheep-carrying country in the Auckland Land District.

At Onewhero, Pukikawa, Churchill, Harapepe, and Karamu there are dairy factories and creameries. Good hotel accommodation is obtainable at Waingaro Hot Springs, where bath-buildings have been erected. The coal deposits in the Raglan County are very valuable, most of them being worked in the neighbourhood of Huntly, on the Waikato railway-line.

Timber.

The extensive forests in the Auckland District contain many timbers of which the durability and strength are of established reputation. Of these the kauri, which is indigenous to the district, is greatly valued. The trees often attain gigantic size, some of the finest specimens being 60 ft. in girth. The

great demand for this timber still continues, whilst rimu (red-pine), kahikatea (white-pine), and totara are also much used for building and other purposes. Most of the timber is disposed of in New Zealand, but during the year ended the 31st March, 1910, 65,828,072 superficial feet of hewn or sawn timber, valued at £333,979, were shipped for export at Auckland and Kaipara.

A return furnished by the Labour Department gives the number of saw-mills in the Auckland District at 31st March, 1909, as 136, employing 2,036 hands; but the number of persons engaged in bushfelling and other occupations in connection with the timber industry must be approximately between four and five thousand. The balk timber is brought by rail or along the coast to Auckland, where it is sawn into various sizes. Several large mills and wood-working establishments have been erected in the city, and also for a considerable distance along the harbour frontage.

With the view to preserving specimens of the various timbers and clumps of forest for scenic purposes, the Government have made extensive reserves in various parts of the district. In addition, State-appointed experts are engaged in planting forest-trees, and in nurturing and cultivating young trees, chiefly in the Rotorua district.

Kauri-gum.

A good demand continues to exist for this unique product, which is found in the Auckland District only. It is manufactured into varnish of the finest quality. A proportion of the gum is also utilized in New Zealand for the same purpose, and altogether about a hundred persons are engaged in the manufacture of varnish, 90 per cent. of which is disposed of locally. In the manufacture of varnish, kauri-gum is said to have an advantage over even the best Manila copal, inasmuch that in its use uniformity of quality may be anticipated with a greater degree of certainty.

The gum industry affords employment for several thousand men, who are engaged in digging, scraping, sorting, and packing it for export. In its original state, being of a viscid nature, it exudes from various parts of the trees, and finally reaches the ground, where it solidifies and becomes a hard yet brittle substance. The principal method of obtaining it is as follows: Where the land has been denuded of kauri-trees, a long rod or spear is used in penetrating the ground to a depth varying from 12 in. to 30 in., according to the nature of the soil. When the existence of gum has been ascertained the soil is turned over and the deposits unearthed. These are of different quality, that of an amber-like transparency being of the highest value.

It might be supposed that kauri-gum which had been covered by earth for many years would have in consequence deteriorated, but such is not the case unless the soil be wet. New gum contains a chemical property which proves troublesome to the manufacturers of varnish, whilst that which has been embedded for a lengthy period does not possess this defect. It has been observed that kauri-trees flourish best on high ground, but large quantities of gum are found in swampy land where the face of nature appears to have undergone a change through seismic disturbance. The value of swamp-gum is generally low in comparison with that of gum obtained at higher elevations; and, indeed, in some instances huge deposits are found in the swamps which are of no commercial value.

A few years ago it was thought that the supply would soon become exhausted, but a competent authority of long experience advances the opinion that large quantities of gum will be obtainable for a considerable period, as deposits are continually being found at greater depths than formerly, and in localities where it was believed that the gum was completely worked out.

The method of obtaining gum by "tapping" the trees has been found to seriously interfere with their development and stability, and it is now considered an illegal act to obtain kauri-gum by this means from trees on Crown lands.

Flax (Phormium tenax).

At a very remote period in the history of New Zealand the value of this excellent product, which is found in abundance, was recognized, and

long before machinery was introduced by Europeans the Natives possessed a method of successfully treating it. Not only were they able to use the flax in making mats and comfortable Native clothing for themselves, but they produced it in large quantities for disposal to the early traders and whalers, who turned the investment to profitable account in the market of the New South Wales capital.

For many years past much attention has been devoted to the dressing of flax by improved methods, and the Government have from time to time greatly encouraged manufacturers by offering a substantial bonus for the production of fibre of a high-grade quality.

In many parts of this district magnificent crops of flax are obtained, and so suitable is much of the swamp land for the cultivation of this valuable product that the flax-milling industry is firmly established.

The flax-mills employ a large number of people, whilst in the City of Auckland a considerable number are engaged in making rope, twine, and cordage. The manufactured articles are of a quality which bear favourable comparison with those imported from other countries. The quantity of flax exported during the year ended 31st December, 1910, was 4,272½ tons, valued at £93,887.

Gold and Silver.

For many years past large quantities of gold have been obtained in this district, the auriferous-quartz reefs being principally located in the Thames, Coromandel, Ohinemuri, and Piako Counties. The method usually adopted in the treatment of the ores is the cyanide process and battery amalgamation.

During the year ended the 31st December, 1910, the quantity of gold shipped from Auckland was 286,526 oz., valued at £1,136,057, besides which 1,711,235 oz. of silver, valued at £171,562, were exported.

The famous Waihi, Waiotahi, and other mines continue to yield valuable returns of gold, and find employment for a large number of hands. As the auriferous-quartz reefs are very extensive in character, it is reasonable to predict that immense quantities of ore will be treated for many years to come with equally satisfactory results. The Town of Waihi contains a population of 6,436, and may be reached by either steamer to the Thames, thence by rail *via* Paeroa, or rail the whole distance from Auckland. The time occupied in visiting Waihi and returning to Auckland is two days.

Many experienced prospectors are still engaged in exploring other parts of the district where auriferous reefs are known to exist, whilst the future of some of the smaller claims which have been pegged off is anticipated with much hopefulness.

Near Mackaytown, Karangahake Riding, in the Ohinemuri County, a cinnabar mine has been discovered and opened up. The deposit outcrops on the face of a steep escarpment about 800 ft. above the Rahu Road. One vein has been traced for about 15 chains, and during 1910 70 tons of ore treated yielded 1,200 lb. of mercury, of a value of £128.

Schools of Mines are established at Waihi, Thames, Coromandel, and Karangahake, subsidized by the Government. The average number of students during 1910 was 155, and the result of the annual examination was very satisfactory in both theoretical and practical work.

Granite.

For some years past the want has been felt in Auckland of a suitable stone for the erection of buildings worthy of the size and prosperity of the city; and notwithstanding the fact that many of the local volcanic stones are excellent for certain purposes, most of the stone used in the construction of the larger buildings has been either blue stone imported from Victoria or the granite from Scotland.

A very large and valuable deposit of what is by many designated a true granite has been found on the Coromandel Peninsula some 20 miles from Cable Bay.

Samples have been submitted to numerous experts both in New Zealand and elsewhere, who have pronounced the stone as equal in appearance, toughness, and durability to any of the imported granites.

Being free from flaws, of a fine grey colour, it presents, when polished, a handsome surface.

The stone is obtainable in any lengths, and can be landed in Auckland at a price to compete with ordinary blue stone. The quarries are situated on the sea-shore close to deep water, and extend over an area of 80 acres.

A company (the New Zealand Granite Quarries, Limited) has been formed locally to develop the deposit, and the material is already being successfully introduced into several fine buildings at present in course of construction. As architects are now specifying Coromandel granite to take the place of the imported stone, and the supply of the former being practically unlimited, there is little doubt that the industry will in the very near future provide employment for a large number of people.

At Putaruru, on the Rotorua line, an excellent building-stone has also been discovered, and is likely to be developed.

Coal.

In various parts of this district extensive coal-deposits exist, and mining operations are successfully carried on in the north at Kawakawa, Hikurangi, Kamo, and Ngunguru, whilst in the south the coal-mines at Huntly and Taupiri continue to supply a household coal of fine quality. The annual output of these mines is about 400,000 tons, most of which is consumed locally.

The City and Suburbs of Auckland are principally lighted by coal-gas, and about 36,000 tons is utilized annually for its manufacture. This is brought from Westport, in the South Island, where a specially suitable coal is obtainable in large quantities.

The value of 42,794 tons of coal exported from Auckland during 1910 was £45,351.

Wool.

This industry does not reach a maximum of importance in this district as compared with other parts of the Dominion, the attention of the settlers being chiefly centred in the dairying industry. At the same time a considerable quantity of wool is produced for export and local use. The product is usually of excellent quality, and when properly graded brings the highest market prices. As the forest lands become denuded larger areas will be available for sheep-grazing. This will no doubt result in the wool industry being found within a few years in the front rank of importance.

The quantity of wool shipped from the Auckland District during 1910 was 14,223,631 lb., valued at £559,587.

Frozen Meat.

The export of frozen meat from Auckland claims a fair amount of consideration. The following was shipped abroad during the year ended 31st December, 1910: Beef, 43,768 cwt., value £59,248; mutton, 7,229 carcasses, weighing 3,654 cwt., value £4,948; lamb, 60,321 carcasses, weighing 17,873 cwt., value £35,635; preserved meats and extract, 19,901 cwt., value £50,960; salted beef, 8,596 cwt., value £11,723.

Dairying.

Some idea of the prosperous condition of this industry may be arrived at from the fact that no less than 120,792 cwt. of butter, valued at £619,337, and 29,276 cwt. of cheese, valued at £73,395, were shipped from the Port of Auckland to the United Kingdom and elsewhere abroad during the year 1910. Distributed over this district are numerous factories and creameries, employing a large number of hands, who are periodically instructed by experts appointed by the Government as to the most improved methods of dealing with the manufacture of cheese and butter. The industry is yearly increasing in importance, and a high standard of excellence has been attained.

Sea-fisheries.

At present about 212 boats of various sizes are engaged in the fishing industry, employment being thus found for about six hundred people. There is great abundance and variety of edible fish, and a steady supply for the market is maintained, consisting principally of snapper, mullet, and flounders. White-bait are also supplied from the Waikato River during the months of August, September, October, and November.

A small quantity of cured fish is exported to Sydney, and the canning of mullet for local consumption and export affords employment to a large number of people.

Numerous beds of rock-oysters exist on both coasts, but during part of the year this fishery is closed. Large numbers of oysters are forwarded during the open season to other New Zealand towns, and small consignments are shipped regularly to Australia. The State now controls the supply of oysters, with the result that only full-grown oysters are picked and placed on the market, and the previous destruction of young beds has ceased.

New fishing-grounds have been discovered on the west coast near Kaipara, from which large hauls of edible fish have been taken by trawling, and the fishing-grounds around the Chatham Islands are also being exploited. Permanent plant is being erected there for preservation of the fish, and there is every prospect of lasting trade being established.

A first-class whaler, the "Hananui," built by Messrs. Smith's Dock Company, Middlesborough, England, with engines supplied by Messrs. Ellingham and Co., South Shields, has arrived in Auckland. She is the property of a private company, and is fitted up with the most modern appliances (including a harpoon-gun at the bow) to enable this class of fishing to be successfully prosecuted. Her tonnage and dimensions are: 127 tons gross and 44 tons net register; 93 ft. over all by 19 ft. beam. She is registered as a fishing-vessel, Port of Auckland, and will carry on operations around the coasts of New Zealand, the Auckland Islands, Campbell Islands, &c.

Trout and Trout-fishing.

The food-supply from this source has grown to great magnitude in the Auckland District, and the splendid sport to be obtained with fly and minnow continues to attract visitors from all parts of the world. The area within which good fishing is to be had extends over hundreds of square miles of country.

Undernoted are the chief rivers, streams, and lakes famous for the numbers, size, and weight of their fish:—

1. All the tributaries of the Upper Thames or Waihou stretching from Lichfield to Tirau and Okoroiri to Matamata. This was the district first stocked by the Auckland Acclimatization Society with rainbow trout (*Salmo irideus*) about the year 1885, and it is still a favourite locality for anglers.

2. The upper portion of the Waipa River and its tributaries, including such well-known streams as the Puniu, Waitomo, Mangapu, &c.

3. The tributaries of the Upper Wanganui, especially the Ongarue.

4. The whole course of the Waikato River is fairly well stocked, and it is probable that Lakes Whangape and Waikare, in the Lower Waikato District, will afford especially good fishing in the immediate future.

5. Nearer to Auckland is the Southern Wairoa, Maungatawhiri, and Maungatangi—all well stocked; also Lake Takapuna, from which rainbow trout of considerable size can be taken. The latter lake is within a distance of eight miles from the City of Auckland.

6. Rotorua and the Thermal District embraces a large number of streams, all well stocked, including those in the neighbourhood of Okoroiri, Atiamuri, and Galatea, also Lakes Rotorua, Rotoiti, Tarawera, Taupo, &c. The last four-named lakes are famous both for the numbers and size of their fish—rainbow trout weighing, each, upwards of twenty pounds have been taken by anglers in those lakes. It may here be added that the rainbow trout (*Salmo irideus*) are gradually, but surely, supplanting the brown trout (*Salmo fario*) and other varieties. The administration of trout culture and fishing in the streams, rivers,

and lakes of the Rotorua District has lately been handed over to the Tourist Department, and the period of fishing has been extended to the 31st May.

Fruit Canning and Preserving.

The soil and climate of Auckland are particularly adapted to fruit-growing, and during the season the supply is so abundant that in many instances it barely pays the producer to send it to the local market. The increased interest in the business of canning is mainly due to this fact, and already the prospects of the industry are good, as canned fruits may now be obtained equal in quality to those imported from California and elsewhere. Fruit-growers are recognizing the importance of the canning industry, and are being encouraged under the supervision of Government experts to cultivate fruits especially suitable for canning. There are now eight factories in this district, and employment is found for about one hundred hands. A number of fruit-growers are also canning fruits in a small way in various parts of Auckland with more or less success.

At the Thames and in parts of the Waikato gooseberries and apricots do well. Peaches grow splendidly in most parts of Auckland, and within a few years large quantities should be available for canning purposes. Apples, plums, and strawberries of fine flavour grow abundantly, and the former, when carefully packed, always command good prices. Evaporated fruits are also disposed of to advantage.

General.

Auckland, on account of its remarkably fine harbour and first-class shipping facilities, possesses many local industries, all of which are in a flourishing condition.

Perhaps first in importance is the Colonial Sugar Company's refinery at Chelmsa, where some 300 hands are constantly employed. The extensive machinery for the treatment of the raw material, which is brought from Fiji, is capable of turning out 1,000 tons of refined sugar weekly, and during the year large additions have been made to both buildings and plant. Most of the output is consumed in the Dominion, but a small portion is shipped to the New Zealand dependencies and elsewhere. The total annual output of the refinery is about 50,000 tons.

Amongst the more recently established industries are the paper-mills at Riverhead, on the upper reaches of the Waitemata. These mills employ some thirty-four hands, whilst the quality of the paper manufactured is entirely satisfactory.

The brick and pottery business affords occupation for about 400 people, and there is every prospect of this number being increased shortly, as, in consequence of the extension of the electric tramways to various parts of the suburbs, a much larger demand exists for building material. Bricks are also being largely used in several important buildings in course of erection.

In the north and on the shores of one of the best harbours in the Dominion (Whangarei) an immense deposit of kaolin has been found. Various tests have proved the quality to be exceptionally good and in every way suitable for the manufacture of china, crockery, vitrified drain-pipes, tiles, &c.

Within forty-three miles of Auckland large hydraulic lime and Portland cement works are in full operation, the annual output being from 40,000 to 45,000 tons. These works employ about two hundred hands. The quality of the cement is such that it is largely used in many important public works. Some 20,000 tons are required in connection with the extensive harbour-works now in progress in Auckland, where reinforced concrete is taking the place of wooden piles in wharf-construction, &c., and also in the erection of the Symond Street-Grafton Road Bridge across the Cemetery Gully. Many thousand tons have also been used by the Napier and New Plymouth Harbour Boards, with the most satisfactory results, in the erection of breakwaters, and in drainage, &c.

The Auckland cement is now being employed in the construction of Arthur's Pass Tunnel. The fame of the local product has already been established in the adjoining States, and in New South Wales the large reservoir on Pott's Hill, used for the Sydney water-supply, is built of the material referred to.

Besides the industries mentioned many others are in operation, including meat-preserving works, flourmills, oil, soap and candle works, boot and shoe factories, tanneries, ironworks, shipbuilding yards, large printing and lithographic works, stationery and book manufacturing establishments, &c. The industries in existence in this district, excluding mines and quarries, number about 900.

The Auckland Electric Tramway Company employ some 535 hands, and maintain a large plant. The power has been increased to 2,100 kilo-watt (about 2,700 h.p.), and additional plant will be installed to meet the rapid expansion of city and suburban traffic. This machinery includes a 600 kilo-watt 3 phase 5,500 volt generator, Green's economizer, a Babcock and Wilcox boiler (the ninth used by the company), a coal conveyer, and extra feeders, &c. Most of this extra plant is installed at the main power-station, where a new engine and boiler house has been erected.

Besides enlarging the car sheds at Epsom, the company has built a sub-station which holds two 500 kilo-watt motor generators. The depot at Ponsonby has also been increased in size and generally reorganized, and everything is being done to bring the tramway system up to date. Two electric sprinklers of a capacity of 3,000 gallons each have been successfully employed in diminishing the dust nuisance, and have proved an inestimable boon to the residents along the tramway route, in the summer months particularly. The largely increased traffic has necessitated the construction of additional cars. Those built locally have proved in every way satisfactory, and the total number now in use is 92, and 8 others are in course of construction. There are 23.31 route miles of track open for traffic, a further extension of sixty-eight chains having been opened on the Grey Lynn line during the year. Since the inauguration of the electric-car service the congestion of population has been greatly relieved, large numbers of people having removed to the suburbs, where building continues at a rapid rate.

THE TARANAKI LAND DISTRICT.

W. ARMSTRONG, Commissioner of Crown Lands.

The Taranaki Land District is situated on the western side of the North Island of New Zealand, at about its widest part, and may be said to be the most compact and fertile district of the Dominion, for, with the exception of the upper half of Mount Egmont, and the ranges adjoining, which absorb about 36,000 acres, the whole of the area—minus what is taken up by the rivers, streams, and lakes—is suitable for settlement, and certainly two-thirds is good land. The gross area of the district is 2,417,299 acres.

Physical Features.

Of mountains, the principal one is the beautiful volcanic cone from which the district takes its name, Taranaki, otherwise called Mount Egmont, which has an altitude of 8,260 ft. This mountain is the centre of distribution for a radius of twenty miles of the volcanic formation known as the "drift," which covers the volcanic rocks below an altitude of 3,000 ft. Hummocks composed of trachyte boulders and cement crop up here and there and make excellent metal-quarries.

Beyond the volcanic formation—that is, from about Urenui on the north and Hawera on the south—the country is generally broken, and the formation is known as papa, a calcareous blue clay, capped in many places by shelly limestone.

The northern portion, between the Tongaporutu and the Mokau Rivers, contains also limestone, greensands, and coal outcrops. At Panirau, a small tributary of the Mokau, about thirty miles from the sea, there is an isolated patch of volcanic agglomerate and tufas, and a similar formation is found at the north-eastern corner of the district.

Eastward of the base of Mount Egmont there are few, if any, mountains worthy of the name, although there are many ranges varying in height from 1,000 ft. to 1,500 ft. above sea-level, and, in a few instances—such as the Mātēmateonga and Waiaria Ranges—they run up to 2,500 ft.

The principal river is the Wanganui, which bounds the district on the east between Taumarunui and Pipiriki, a distance of eighty-four miles. Its average width varies from 2 to 3 chains. For nearly the whole distance it is shut in by high precipitous hills, and in many places by perpendicular walls of rock. The scenery is very grand and beautiful. There are numerous rapids, but few of them are dangerous to skilful canoeists. The caves near Pipiriki are very extensive, and rich in stalactites, the entrance being hung with a mass of ferns and lichens. There are some magnificent views near Atene. A mile or two below Pipiriki the banks of the river rise to a great height, and are very imposing. From the caves, for some sixty miles to the houseboat, the river flows between perpendicular walls of rock, all festooned with ferns and lichens, with a background of luxuriant bush. Over these cliffs fall numerous streams, making a succession of waterfalls. At Manganui-a-te-ao, an immense cliff rises like a mighty pillar on the right, and the rivers meet like two lanes, walled in by massive piles of masonry. New Zealand's great scenic river-trip may now be done in a number of ways. From Wanganui, the steamers run tri-weekly to Pipiriki, and excursions are made from that point to the beautiful upper reaches beyond, returning to Pipiriki House in the evening. The traveller can then return to Wanganui, taking train either north or south, or he can take coach round Ruapehu, Tongariro, and Ngauruhoe to the Hot Lakes, or may go on up stream to Messrs. Hatrick and Co.'s houseboat, sixty miles beyond Pipiriki, returning to the latter point the next day, or proceed to Taumarunui, the junctioning point at the head of the river with the Central Railway, taking train from there to Auckland, Rotorua, Wellington, &c. Coming down stream the traveller may take the train from either Auckland, Rotorua, or Wellington to Taumarunui, staying there overnight; take the steam-launch down stream the following day to Pipiriki, staying there for the night, and going on to Wanganui the next day. The Taumarunui to Pipiriki service is tri-weekly in the summer months, and twice a week during the winter. From Taumarunui to Pipiriki is eighty-four miles, and from Pipiriki to Wanganui sixty miles. Good accommodation can be procured at the houseboat and Pipiriki. Messrs. Hatrick and Co. have a fleet of fourteen steamers and launches, the route being now one of the most largely frequented in New Zealand. The fares on the river are: Taumarunui to Pipiriki, 35s. single, 50s. return; Pipiriki to Wanganui, 15s. single, 20s. return; Wanganui to Taumarunui, 50s. single, or *vice versa*. Accommodation at Pipiriki and the houseboat can be obtained at the rate of 2s. 6d. for each meal and bed.

The next river in size is the Mokau, bounding the district on the north. It is navigable for handy steamers drawing from 7 ft. to 8 ft. of water as far as the coal-mines, about twenty-three miles from its mouth, and for canoes as far as Totoro, twenty-six miles farther up. Several outcrops of coal are found on its banks, and, as limestone is also present, the river is likely to become an important waterway of the district. The scenery on either side, although not on quite so grand a scale as may be seen on the Wanganui, is very beautiful.

The other large rivers are the Waitara and Patea. The former has its source about midway between the coast and the Wanganui River, in an easterly direction from Pukearuhe, between New Plymouth and the Mokau. It is about a hundred miles in length, and runs out at the Town of Waitara, some ten miles north-east from New Plymouth. There is a bar at the mouth, but steamers of 300 tons can enter safely in calm weather, and, although there are numerous rapids on its course, it is navigable for canoes for about ninety miles.

The Patea River rises in Mount Egmont, and, after traversing a tortuous course of about 110 miles, runs out at the extreme southern end of the provincial district. It has a bar harbour, with a depth of 13 ft. to 14 ft. at spring tides. Steamers of from 40 tons to 50 tons trade regularly to the Town of Patea, which

is situated a mile or so north of the mouth. The Patea is navigable for canoes for fifty miles.

Besides these rivers there are many smaller ones, and streams innumerable—in fact, no district in the world could be better watered and at the same time be so secure from disastrous floods. It is estimated that between the Mokau and the Patea there are no fewer than eighty-five named streams emptying themselves into the Tasman Sea, fully sixty of which flow from Mount Egmont.

Excepting the Ngaire Swamp, a block of open land near Eltham, 3,700 acres in extent, now drained and under cultivation, there are no plains, properly so-called, in the district, although the stretch of very fertile country lying between the Waingongoro and Otakeho Rivers, comprising an area of about 25,000 acres, is known as the Waimate Plains.

There are no lakes worthy of the name. The largest sheet of water is Rotokare, situate about twelve miles from Eltham; it is about half a mile in length, with an average width of six chains. There are also a few small lakes inland from Waverley, at the southern end of the district.

The whole of the district, with the exception of a fringe of open country along the coast from Pukearuru to Patea, averaging three miles in width, and containing about 250,000 acres, and some valleys at the north-eastern corner of the district, about 150,000 acres in extent, was originally covered with heavy forest, but this is rapidly disappearing under progress of settlement and operation of sawmills to deal with such timber.

The larger timber is chiefly rata, rimu, matai, tawa, kahikatea, kohekohe, pukatea, rewarewa, hinau, with a few totara scattered here and there. Among the smaller trees may be mentioned the kotukutuku or fuchsia, karaka, and mahoe.

An area of 72,565 acres, contained within a radius of six miles from the summit of Mount Egmont, was originally set apart as a forest reserve. To this has now been added 1,040 acres on the lower slopes of Pouakai Range, with an additional 5,500 acres on the Patua Range, making a total of about 79,000 acres, which has by Act of Parliament been set apart as the "Egmont National Park," the internal affairs of which are administered by a partly elected and partly nominated Board of ten members. At about three miles within the reserve the forest begins to get stunted; and at four miles and a half it gives place to low wiry scrub, which ceases at five miles, or an elevation of about 4,000 ft. At 5,000 ft. the moss ends; beyond this point to the summit the mountain is composed of loose scoria and lava.

A comfortable house, known as the North Egmont Mountain-house, has been built at an elevation of 3,200 ft. on the northern face of the mountain, at a distance of twenty miles from New Plymouth by the Junction and Egmont Roads, and tourists can be driven the whole of the way, either by horse-conveyance or motor-car; by the latter the house is reached in one hour and a half from New Plymouth. This house is maintained by the committee for the northern division of the Egmont National Park, and is open for the accommodation of visitors all the year round. The keeper also acts as guide. A telephone-office named Tahurangi has been opened at the house. The time usually occupied in the ascent from the house is from three to four hours for men, and four to six hours for ladies. There are two women's rooms at one end of the house, and two men's at the other, with large common living and dining room in the centre. Visitors have the option of being supplied with meals at a cost of 2s. each, by the week at 7s. per diem (beds included), or they may provide and cook their own food. Beds are also provided. Horse-feeds, 1s. 6d. each; paddocking, 6d. daily, or 2s. 6d. a week. A small charge for use of house is made to visitors of 1s. per day, or part of day, or 1s. 6d. if staying the night. In addition to the mountain-house, the Board has erected a cottage of three rooms, comprising two bedrooms (fitted with four bunks each) and one living-room in between. This cottage is intended for renting by the week to family parties, only one such party occupying it at a time, the charge being 2s. per diem for each adult, children under twelve years half-rates. The cottage is not let to any one party for a

longer period than two weeks while there are other applicants. The Board provides cooking and other utensils, firewood and water, also mattresses and pillows; but visitors can take their own blankets, and provide and cook their own food. The caretaker at the mountain-house keeps a small stock of the principal lines of food usually wanted for sale to visitors. The cottage is within 60 or 70 yards of the mountain-house, and in charge of the same caretaker, but parties desirous of renting it should communicate with the Honorary Secretary to Committee for Northern Division of Egmont National Park, New Plymouth, giving dates between which they require it. These applications are booked in order of priority of receipt (after notification that offers will be received, usually in the early part of December). Guide's fee for mountain, £1 per party. During the past season there were about 2,500 visitors, remaining various periods of from one or two days to as many weeks. The view from the top is superb, including as it does the volcanic cones of Ruapehu, Ngauruhoe, and Tongariro, the whole of Taranaki, and a considerable portion of Auckland and Wellington Districts, also across Cook Strait to the mountains of Marlborough and Nelson Districts of the South Island. In fine weather, when the snow is off, the mountain can be ascended without risk. A considerable sum has been expended in improving the accommodation of the house. By the next season (1911-12) it is expected that an up-to-date hotel will be in use, as plans are now being prepared for a building where all the usual hotel comforts can be obtained.

The mountain can also easily be ascended from Stratford side, the return journey occupying about thirteen hours, including stoppages. The Pembroke Road Mountain-house has now been removed to a lower and less exposed situation, near the source of the Patea River, where there is a plentiful supply of water and wood. The house in the summer season is under the charge of a caretaker and his wife, but is closed during the winter. There were 150 visitors during the past season.

A favourite route is from Hawera or Eltham *via* Manaia or Kaponga and Dawson's Falls. At the latter place a comfortable shelter-house, capable of accommodating over forty people, has been erected, and is known as the Falls Mountain-house (altitude, 2,990 ft.). This house, which is close to the Falls (65 ft.), is within an easy two hours' ride of Kaponga. The telephone has recently been extended to this house. During the season the house is in charge of a caretaker, and food, horse-feed, and paddocking can be obtained. Two comfortable cottages have been erected in connection with the house. In addition to the cottages and main building, another house has been erected and comfortably furnished. Visitors can have practically all the comforts of ordinary hotel life, as in lieu of bunks, beds are provided, and also first-class meals. The tariff at this house is 9s. per diem. Water is obtained from the adjoining creek by means of a ram. From the house to summit of Mount Egmont occupies from four to six hours' climbing at a moderate pace, the time being in accordance with the strength and composition of party. From the top the tourist can, instead of returning by the same route, drop down to the mountain-house on the north or New Plymouth side of the mountain. The walk would not occupy over two hours, easy walking, or he could go out *via* Stratford, there being a good walking-track between the houses. A weekly coach-service has been instituted both at Hawera and Eltham, while Stratford, as a base, is equally desirable to start from; the whole distance can be driven over. About 3,000 persons visited the mountain by this route during the season.

A track has been partly made from the western side of the mountain, enabling tourists to ascend *via* Rahotu. A small accommodation-house has been erected, 32 ft. by 14 ft., consisting of a general room and two sleeping-rooms, each containing twelve bunks. Tables, forms, and utensils have also been provided. The number of visitors was about 150.

Soils.

The volcanic soil, the boundaries of which have been already described, varies a good deal in quality. The best is believed to be on the south side of the

mountain, between Stratford, Hawera, and Opunake, but not less than two or three miles from the forest reserve boundary. The strip of land, varying from two to three miles in width, along the coast between New Plymouth and Pukearuhe is of excellent quality, and quite as good as that on the south side of the mountain. It is found that the papa country to the north, east, and south-east of the volcanic deposit is much richer and more lasting as pasture-land than that around Mount Egmont. The frequent slips in this class of country, occasioned by the gradual decay of the stumps from the felled bush, causes a rich deposit of loam on the lower lands. The carrying-capacity of the land is, on an average, two and a half to three sheep to the acre.

Dairying.

Taranaki is essentially a grazing and dairying district, its chief products being butter and cheese.

There are 120 dairy factories and 77 skimming-stations scattered over the district. Of these factories, 61 produce butter only, while 59 produce cheese only. There are also in this district 7 registered packing-houses for milled butter, 198 registered private dairies for butter-making, and 2 for cheese-making, besides many small plants run on individual farms of which no record is obtainable.

During the year 1910 the output from the Taranaki Freezing-works was: Butter, 202,020 boxes, weighing 5,050 tons 10 cwt. net; cheese, 46,779 cases, net weight 3,132 tons 10 cwt. During the hot season the factories and railway-vans carrying butter are supplied with ice from the works at a nominal cost. These freezing-works are situated at Moturoa, near the Breakwater, and alongside the railway-line. Most of the butter from the southern end of the district now goes to Patea.

Mining.

The only mining going on at present is at the Mokau Coal-mines, which are situated on the Mokau River, about twenty-three miles from the sea, the river being navigable right up to the mines for vessels of 7 ft. 6 in. draught. The coal is the best class of pitch-brown, and is excellent for household and steam purposes. The mine is ventilated by a large Hay's fan driven by a 20-horse-power steam-engine.

Ironsand is found in great abundance on the seashore from Mokau to Patea, a distance of 130 miles. It produces, when smelted, from 50 to 60 per cent. of iron of the finest quality. The first attempt to smelt this sand was made in 1848, and several trials have been made since, but the heavy cost of production and the absence of capital and modern appliances have, so far, retarded the industry.

Petroleum-boring.

A considerable amount of capital has been expended in attempts to prove the value of the oil-deposits, indications of which are to be found exuding from the soil in various parts of the district. At Moturoa (two miles west of New Plymouth) increased activity has been displayed during the past two years by the Taranaki Petroleum Company. One of the bores put down by this company and known as No. 2, is stated as yielding at the rate of 90 barrels, or 3,780 gals., of crude oil per week. This flow of oil has continued for the last fifteen months without mechanical aid. The gas from this well is used for generating steam at No. 5 bore, thus saving the company some £7 per week for ordinary fuel. No. 3 bore is down to a depth of 3,820 ft. and is flowing at the rate of 70 barrels, or 2,940 gals., per week. It is claimed that this is the deepest bore in the Dominion. At a depth of 3,780 ft., a terrific pressure of gas was encountered, doing considerable damage to the plant. No. 5 bore has been commenced during the year, and is now down to a depth of 1,700 ft. The bonus offered by the New Zealand Government for the first 250,000 gals. of marketable crude petroleum has been won by this company, and it is now entitled to the first instalment of the bonus—viz., £2,500.

Kaolin.

Deposits of kaolin have been found close to New Plymouth, and the quality is reported as excellent.

Climate.

The climate of Taranaki is remarkably healthy, without any extremes of temperature. Below is given a table of mean, maximum, and minimum temperatures in shade for each month of the year ending December, 1910, at New Plymouth:—

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Mean temperature	69.59	68.6	66.59	60.75	58.88	55.93	53.19	55.69	56.86	60.45	62.91	63.67
Extreme maximum temperature ...	80	80	82	78	73	71	71	73	73	74	77	78
Extreme minimum temperature ...	51	51	50	42	37	35	35	36	38	41	46	42
Number of days on which rain fell ...	14	11	15	14	21	23	25	26	16	18	10	18
Total rainfall per month in inches and decimals ...	8.03	4.56	3.69	1.64	3.26	4.84	4.99	6.45	2.65	5.72	3.52	6.79
Mean barometric reading for the month ...	29.81	29.39	29.9	29.9	29.9	29.84	29.54	29.9	30.59	29.74	29.88	29.7

The mean barometric reading was 29.84 in. for the year. Total rainfall, 56.14 in. on 211 days. The rainfall varies considerably, as, for instance, at Norfolk Road, three miles south of Inglewood, the rainfall for the year 1910 was 95.55 in. on 197 days, the maximum daily fall being 2.88 in. on 9th May. The average rainfall at New Plymouth during the past sixteen years was 59.46 in., and at Norfolk Road for same period 101.25 in.

Chief Towns.

The principal town of the district, New Plymouth, founded in 1841 by the Plymouth Company (population 5,238), is situate on the seashore, about two miles from and to the north-east of the picturesque rocky islets known as the Sugar Loaves. The general appearance of the town is very attractive, and it abounds in neatly kept gardens. The recreation-grounds, now called Pukekura Park, from which a good view of Mount Egmont is obtained, form a favourite resort. This park comprises some 50 acres. Other favourite resorts are Marsland Hill (in the centre of the town), Fort Niger (east end), and Western Park (west end). Marsland Hill is of great historic interest. During the Maori War it was occupied as a military post and surrounded by a stockade, and there the inhabitants of New Plymouth used to take refuge when an attack by the Maoris was threatened. A fine esplanade has recently been opened up along the sea-front, and, with the exception of a break of about a quarter of a mile, extends from the Henui River to the Breakwater, a distance of about four miles. Sea-bathing is very popular, especially at the Breakwater and the east end, at the mouth of the Henui River; at the latter place large dressing-rooms have been erected and fitted up with every convenience, including electric light. During the warm weather this part of the beach attracts hundreds of people, as, in addition to the bathers, large numbers come to picnic. Schools as far south as Eltham (thirty-six miles) annually visit the beach for their picnics, and camping out on the foreshore near Moturoa, and also at the Henui River, is indulged in to a large extent every season.

Manufactures are represented by three sash and door factories, a boot and three coach factories, a brewery, three cordial-factories, tannery, fellmongery, bone-mill, and iron-foundry, with freezing-works in the suburbs. Municipal undertakings owned and controlled by the borough consist of a septic-tank drainage system; water-supply, the reservoir is capable of holding 1,000,000 gals., and there are about fifteen miles of mains; a very efficient electric-lighting service; large up-to-date abattoirs with chilling-rooms; and fine salt-water swimming-baths, 100 ft. by 45 ft. The gas-supply is in the hands of a private company. New Plymouth's suburbs are—the Town Districts of Fitzroy and

St. Aubyn, also Vogeltown, Westown, and Moturoa; total population of the suburbs, 2,495.

New Plymouth is 251 miles by rail from Wellington, the railway running in a northerly direction through the district from Patea to Lepperton, where it turns at right-angles westward for nine miles to New Plymouth. From Lepperton there is a branch line to Waitara, five miles distant.

The Port of New Plymouth is situated at Moturoa, two miles from the town. Protection for shipping is afforded by a concrete mole or breakwater running in a north-east direction for a distance of 2,512 ft. Under the lee of this there is wharf accommodation provided for the coastal and oversea trade. Steamers up to 2,000 tons can be berthed here in all weathers. There is a fixed red light on the hill behind the Breakwater at a height of 100 ft., visible for sixteen miles. A red light, 45 ft. high and visible for ten miles, is exhibited from a small tower on the bluff of the hill. These two lights in line lead to the end of the Breakwater, and are lighted by electricity. The wharf is connected with New Plymouth by both rail and road. Passenger-steamers run to Onehunga three times a week in the summer, and twice a week in the winter. The Breakwater was built at a cost of £200,000, borrowed under security of one-fourth of the land revenue of the Provincial District of Taranaki, and the right to levy a rate over certain lands. This loan maturing in 1909 was repaid partly out of accumulated sinking funds amounting to £65,000, and partly out of new loan. The new loan amounting to £275,000, after repaying balance of old debt, left a sum of £130,000 with which to carry out improvements, such as purchase of a dredge, widening and strengthening wharf, deepening berthage and approaches thereto, &c. The present loan of £275,000 was raised at $5\frac{1}{2}$ per cent., $4\frac{1}{2}$ per cent. interest, and 1 per cent. sinking fund, and on the security of harbour dues, &c., one-fourth of the land revenue, and the right to levy a graduated rate over certain lands. The principal oversea exports from the Breakwater for the year 1910 (exclusive of all coastal trade) were: Butter, value £438,325; cheese, value £163,449; fungus, value £1,243; hides, value £8,915; wool, value £3,395; tallow, value £130; total value, £620,785. Imports (oversea), value £158,782. Customs duties £45,065 15s. 2d. The wharfages and dues for the year 1910 totalled £11,820, made up as follows: Wharfage, £7,504; berthage, £3,053; warps, £656; water, &c., £132; port charges, £475. Three hundred and eighty-nine vessels entered and left the port during the year 1910, their aggregate tonnage being 186,830. Imports were 72,567 tons, and exports 14,282 tons, totalling 86,849 tons.

The wharf has been widened for a distance of 1,000 ft. During the past year the old dredge removed 94,839 cubic yards of sand from the harbour, at a cost of 4-46d. per cubic yard. The new combined bucket and suction dredge "Paritutu," built at a cost of £35,000, commenced work in July, 1910, and has removed 89,173 tons of spoil at a cost of 8-39d. per ton. Most of the work has been in very hard rock and conglomerate, blasting having to be resorted to to break up the bed. Some of the boulders removed weighed from 10 to 12 tons. The "Paritutu" has dredged to a depth of 33 ft. at low water for a distance of 300 ft. at the outer end of the wharf, and a width of 90 ft.; the next 200 ft. by 90 ft. has been dredged to 28 ft. at low water, and the next 400 ft. by 90 ft., to 16 ft. at low water. It is confidently anticipated that by the spring of 1912 large cargo-boats will load and discharge at the wharf.

Hawera, the next largest town, is situated on the eastern edge the Waimate Plains, about two miles from the sea. The population is 2,685, and the town is lit with electric light and gas supplied by private companies. The Wellington - New Plymouth Railway runs through the town, the distance by rail from New Plymouth being about forty-eight miles. Hawera is surrounded by a first-class dairying and grazing country, capable of carrying a very large population. Hawera possesses an excellent water and drainage scheme, the water being obtained from the Kapuni River, eleven miles from the town, and the sewerage being carried by gravitation direct into the ocean. Municipal undertakings owned and controlled by the borough are the public abattoirs, fresh-water swimming-baths, and fire-brigade station, and the town also possesses an excellent free reading-room and circulating library.

The Town of Patea is situated on the coast, at the extreme southern end of the district, and has a population of 919. There is a splendid grazing district inland, with a large area of land yet to be opened up. There is a dairy factory, which has two branch creameries in the country. A refrigerating company for dairy and other produce has also been established, and is proving a great success. The streets are lighted with electricity, and there is a water-supply for fire-prevention purposes. Exports for 1910 were: Wool, 4,974 bales; fungus, 326 bags; tallow, 1,764 casks; pelts, 196 casks; loose hides, 6,915; butter, 78,034 boxes; meat, 2,351 cases; sundries, 654 packages; cheese, 103,314 cases; empties, 2,186; skins, 92 bundles; cattle, carcasses, 7,163; sheep, carcasses, 11,164; total value of exports, £586,729. Imports: Ordinary, 12,143 tons; coals, 2,333 tons. Wharfages amounted to £2,089; dumping dues, £217; tonnage dues, £705; port dues, £103; water, &c., £8; rents, £563. The Harbour Board has an up-to-date wool-dumping press and hydraulic pumps. The width between the east and west pier-heads is 260 ft.; width of channel about 180 ft. gradually narrowing to 100 ft. as the beacons are approached. The pilot reports the depth of water at not less than 12 ft. at high water, springs, and 9 ft. at high water, neaps, with a straight channel. Steamers trade regularly to Westport, Greymouth, Lyttelton, Wellington, and other ports. The Board has erected a west breakwater, of concrete, which has been carried out to a distance of 700 ft., and this should prove a great protection to steamers, and prevent the encroachment of sand common to bar harbours. The Board is also extending the eastern breakwater, and so far 410 ft. has been added to the original structure. Two hundred and seventy-five vessels entered and left the port during the year 1910.

Stratford lies about midway between Patea and New Plymouth. It has a population of 2,639. The height above sea-level is 1,000 ft., and the climate is bracing though somewhat moist. Stratford possesses an excellent high-pressure water-supply, the water being obtained from the Patea River, some three miles above the town, by means of filtration tunnels carried under the river-bed. A complete septic-tank system of drainage has also been instituted. There is a good public library and reading-room, and a municipal town hall capable of seating 800 persons. The town is lighted with electric light supplied by a private company, and possesses fresh-water swimming-baths. The main road to Auckland—known as the Stratford-Ongarue (now Ohura Road)—commencing at Broadway, Stratford, is formed as a dray-road for fifty-nine miles and a half (of which thirty-three miles is metalled) passing through Toko, Strathmore, and Whangamomona, then formed as a bridle-track for twelve miles. The remaining forty miles to Ongarue on the North Island Main Trunk Railway is formed as a dray-road, and partly metalled. A commencement has been made with the construction of the railway-line between Stratford and Auckland *via* Ongarue, the line being completed and open for traffic as far as Te Wera, a distance of twenty-three miles. A short branch has also been constructed from Waipuku to Manganui, on the slopes of Mount Egmont. This line is for the purpose of opening up the extensive stone-deposits that exist in the Manganui Gorge of great value for road-metalling and railway-ballasting purposes.

Waitara, a seaport town of about 1,452 inhabitants, is situated on the river of the same name, a mile up from the sea, and about ten miles north-east from New Plymouth. The town is lighted by electricity. The Waitara Freezing-works have passed into the hands of Messrs. Borthwick and Sons, who have rebuilt and greatly enlarged the works, the storage capacity now being for 40,000 carcasses of mutton, together with five freezing-rooms, capable of hanging 2,000 carcasses; also a beef-chilling room and a mutton-chilling room. Provision is made at the slaughter-house for accommodation of fourteen mutton and six beef butchers. The freezing plant consists of two 60-ton Hercules machines, guaranteed to freeze 2,000 sheep per day. The boiling-down and tallow department is most complete and up to date, and a large manure plant has now been erected. The works are fitted throughout with electric light. The following were the principal direct shipments Home during the year 1910: 6,123 tons of frozen meat, 6,258 bales of wool, 16 bales of leather, 1,798 casks of tallow, 252 casks of pelts, 736 casks of oleo,

188 boxes of butter, 26 bales of horns, 68 casks of runners, 435 sacks of hides, 4,058 cases of canned meats, and $3\frac{1}{2}$ tons of general cargo. The number of direct steamers loading in the roadstead was 18, of a net tonnage of 75,582. All produce is conveyed on board the New Zealand Shipping Company's ocean-going steamers (which anchor in Waitara roadstead) in specially constructed and insulated barges. The principal exports from the port coastwise for the year 1910 were: Grain, 81 tons; wool, 151 bales; grass-seed, 44 tons; manure, 255 tons; timber, 56,512 ft.; chaff, 1,283 sacks; hides, 60; sheep, 356; horses, 5; cattle, 16; casks of tallow, 18; bales of flax, 803; butter, 135 boxes; fungus, 30 bales; flour, 68 tons; general cargo, 967 tons. Imports, coastwise, for the same period were: Grain, 85 tons; manure, 92 tons; lime, 52 tons; timber, 1,083,368 ft.; coal, 4,328 tons; wool, 1,094 bales; skins, 83 bundles; fungus, 41 bales; flour, $11\frac{1}{2}$ tons; hides, 91; sheep, 30; bales of flax, 803; cattle, 4; pigs, 46; butter, 117 boxes; cement, 193 tons; tow, 4 bales; general cargo, 2,622 tons. Harbour dues amounted to £1,620; pilotage, £125; port charges, £170; berthage, £94; wharf rents, £55; rents of endowments, £987. Two hundred and sixty-two vessels of a tonnage of 86,852 entered at the port during 1910.

Inglewood, situated on the railway-line, sixteen miles south-east of New Plymouth, is a flourishing little town with a population of 1,273 inhabitants. The town is well equipped with livery stables, coffee palace, and hotels, and is lighted by electricity supplied by a private company, the Corporation having the right to take over the works when they choose. The town is well endowed, and possesses a public library and reading-room, public swimming-baths, band, fire-brigade, gymnasium, and various kindred institutions for the recreation and convenience of the inhabitants. The bacon-factory during the year put through 4,143 pigs, costing £8,435, an average of £2 0s. 6d. per pig. The factory is worked by a 24 in. turbine, the water being conveyed in a race 10 chains long. It is provided with a 4-horse-power tubular boiler, a lard jacket, and Californian pump. There is also a size "D" ammonia refrigerating-machine.

Eltham, population about 1,737, is situated on the railway-line between Stratford and Hawera, being six miles and a half from the former and twelve miles from the latter town. A first-class high-pressure gravitation water-supply has been provided, whereby provision for a population of 10,000 is made. A septic-tank system of drainage has also been provided, and the town possesses swimming-baths. In the matter of fire-prevention a first-class station has been erected and equipped with the most up-to-date plant. Municipal concerns owned by the Borough consist of an up-to-date gas-supply, and a fine Town Hall capable of seating 700 people.

Opunake, a seaport town of 488 inhabitants, was visited during the year by 24 vessels, the imports and exports totalling 971 tons. The exports were only 5.6 per cent. of the total of imports, which suffices to demonstrate that the want of proper shipping facilities is a serious drawback to the district. It is estimated that with suitable protective works the trade of the port would be considerably increased; at low water the bay has an area of about 50 acres, mostly all deep water. With the exception of some wool, all the produce of the district is sent away by road, and not more than 25 per cent. of the imports of the immediate district are landed at the port by reason of the uncertainty of the discharge of cargo. The port is now in a better position, through the passing of the Opunake Harbour Act of 1908 constituting a harbour and a Harbour Board. The Act gives the Board power to buy out the Opunake Wharf Company, to levy rates, and to borrow up to £40,000, but so far no steps have been taken to put it into operation. It is probable that during 1911 an election of a Harbour Board will be made.

Other small townships are: Manaia, population 537, on the Main South Road, between Opunake and Hawera; Normanby, population 441, three miles north of Hawera, on the railway-line; Kaponga, population 384, on the Eltham-Opunake Road, nine miles from Eltham; Whangamomona, on the Ohura Road, and on the line of proposed railway between Stratford and Ongarue, forty-one

miles from Stratford, population 122; and Mangaroa (also called Ohura), population 127, on the Ohura Road, and also on the aforesaid line of proposed railway, thirty miles from Ongarue on the North Island Main Trunk Railway.

Roads and Railways.

The chief means of communication is the railway from Wellington, which traverses the district between Patea and New Plymouth—a distance of sixty-six miles. Through trains run every day, except Sunday, between New Plymouth and Wellington, and *vice versa*, a distance of 251 miles. As already stated, a railway from Stratford to Ongarue, on the North Island Main Trunk Railway, is under construction, and is open to Te Wera, twenty-three miles from Stratford.

The Main North Road runs from New Plymouth, passing through the Towns of Waitara and Urenui; and is formed as a coach-road to Mokau, the northern boundary of the district. All the streams are bridged with the exception of the Mokau River, on which is a good ferry. A coach runs daily (except Sundays) from Waitara to Urenui and back, and from Waitara to Awakino (in the Auckland District), a distance of fifty miles, on Wednesdays and Saturdays, returning on Mondays and Thursdays. This coach calls at the Villages of Uruti, Okau, Tongaporutu, and Mokau. From Mokau there is a dray-road through to Te Kuiti, on the North Island Main Trunk railway system. At Pio Pio, on the Mokau—Te Kuiti Road, sixteen miles from Te Kuiti, a dray-road branches off to Aria Township, nine miles distant, and a coach runs from Te Kuiti to Aria every Monday, Wednesday, and Friday, returning the following day. About midway between New Plymouth and Waitara the Mountain Road diverges and runs almost due south, and chiefly along the railway, for a distance of forty miles, connecting with the Main South Road at the Town of Hawera. This is at present the principal road in the district, tapping, as it does, large numbers of district roads, and passing through the Towns of Inglewood, Midhirst, Stratford, Eltham, Normanby, and Hawera.

The Ohura Road branches from the Mountain Road at Stratford. It is formed and open for traffic as a dray-road for fifty-nine miles and a half from Stratford, and for horse-traffic to Tatu Village. From Tatu the road is a formed dray-road to Ongarue, on the North Island Main Trunk Railway, a distance of forty miles. A coach runs in summer-time every Monday, Wednesday, and Friday (returning on following days) between Te Wera, the last station on the Stratford—Ongarue branch line, and Whangamomona Village, a distance of eighteen miles. A coach also runs daily in summer-time from Ongarue to Mangaroa Township (Ohura Post-office), a distance of thirty miles, returning daily. This road opens up a large area of fertile country.

The Main South Road from New Plymouth follows the trend of the coast to the south, and was at one time the coach-road to Wellington. It passes through the Villages of Omata, Oakura, Okato, Rahotu, Otakeho, Manutahi, and Kakaramea, and the towns of Opunake, Manaia, Hawera, and Patea. A coach runs between Opunake and New Plymouth and back daily.

The Junction Road runs south-east from New Plymouth, and crosses the Mountain Road and railway at Inglewood, thirteen miles out; it is metalled for thirty-eight miles, and formed as a dray-road to forty-five miles and three-quarters, where it connects with the Ohura Road at a distance of thirty miles from Stratford. This road crosses a number of district roads; hence its name.

The Opunake Road runs from Stratford to Opunake, twenty-six miles, skirting the southern base of Mount Egmont. It is formed and metalled for twenty miles; the remainder is open for horse-traffic only. Vehicular traffic turns down the Manaia Road to Kapanga, thence along the Eltham—Opunake Road to the latter place. This route is metalled throughout.

The Eltham Road runs from Eltham to Opunake, twenty-five miles, connecting with the Opunake Road at Ponehu, seven miles from Opunake. This is formed and metalled throughout.

The Tongaporutu—Mangaroa road connects Tongaporutu with Mangaroa. It is formed as a dray-road for fourteen miles and a half from Tongaporutu, as

a bridle-road for three miles and three-quarters, and is open for horse-traffic for the remaining distance. From Mangaroa the road is formed as a dray-road for three miles, and as a bridle-road for a further two miles.

The Rawhitiroa Road runs from Eltham in an easterly direction towards Waitotara, and is formed and metalled as a dray-road for eighteen miles and three-quarters, formed as a dray-road only for the next thirteen miles and a half, and from there on to its junction with the Koane Road, a distance of about six miles, it is formed as a bridle-road only.

The other main roads in course of construction are the Moki Road, the road from Whangamomona to the Wanganui River, the Tangahoe and the Mataimoana Roads.

Lands being prepared for Settlement.

16,700 acres, Whakaihuwaka B Block, in Taurakawa Survey District, adjacent to the Wanganui River, portion being in Wellington Land District; hilly forest country.

13,400 acres, Aratawa, Mangapukatea, and Raoraomouku Blocks, in Omara Survey District, adjacent to the Wanganui River; hilly forest country.

20,300 acres, Whakaihuwaka A Block, in Taurakawa Survey District, adjacent to the settled country at the head of the Puniwhakau Valley and extending south-easterly towards the block previously mentioned; hilly forest country.

17,400 acres, Taumatamahoe 2B No. 2A Block, in Mahoe Survey District, extending westward from Wanganui River; hilly forest country.

8,900 acres, adjacent to Tangitu Improved-farm Settlement, in the Mapara Survey District; hilly forest country.

17,900 acres, Whatitokarua Block, in Ohura and Rangi Survey Districts, lying to the south-west of Ongarue Railway-station and extending to Ohura Road; hilly and undulating forest country; portions open fern land.

All the above-mentioned lands will, when cleared of forest, be well adapted to the rearing of cattle and sheep.

The total area of Crown lands for future disposal is about 296,613 acres.

A guide, giving particulars of any Crown lands open for selection, will be supplied free to any one applying personally or by letter to the Lands and Survey Department, New Plymouth.

It may be said, in conclusion, that there is every sign of genuine prosperity throughout the district, which has advanced rapidly during the last few years, and will no doubt continue to do so.

THE HAWKE'S BAY LAND DISTRICT.

C. R. POLLEN, Commissioner of Crown Lands.

The Land District of Hawke's Bay comprises that portion of the east coast of the North Island from Waimata Stream, near Cape Turnagain, in latitude 40° 30' northwards to Potikirua, about thirty-five miles beyond the East Cape, and contains the Waiapu, Cook, Waikohu, Wairoa, Hawke's Bay, Waipawa, Patangata, Woodville, Waipukurau, Dannevirke, and Weber Counties.

It has a seaboard of 300 miles, with an average depth from the coast of forty-five miles, and embraces an area of 5,508,900 acres. Its western limit is defined by the Ruahine, Kaweka, Ahimanawa, Raukumara, and other high ranges that form the watershed between the rivers flowing through it to the sea, and those that run to the west coast and the Bay of Plenty.

Physical Features.

The Ruahine Range extends northwards for about sixty miles from the Manawatu Gorge as far as the valley of the Ngaruroro River. Its altitude varies from 3,000 ft. to 6,000 ft., and for a considerable distance its summit is snow-clad during the winter months.

The Kaweka, a shorter range, divided from the Ruahine by the Ngaruroro River, attains an altitude of 5,650 ft., is very rugged and steep, and a prominent feature in the landscape in winter, covered as it then is with snow.

From these two ranges, which fall very abruptly on the Hawke's Bay side, the land slopes gradually to the sea, forming in some parts fine rolling hills—the essence of sheep-country—in others extensive plains, with comparatively little poor soil.

Northwards from the Kaweka there is a series of forest-clad ranges in varying height, stretching away in the direction of the East Cape. Hikurangi, the highest point, is a bold peak with an elevation of 5,606 ft., rising so abruptly on all sides that the ascent can be made only at one point, and that with difficulty.

The only lakes in the district of any extent are Waikaremoana, and Waikare-iti, so famous for their magnificent scenery. Waikaremoana Lake lies about thirty-five miles inland of Wairoa Borough, is eleven miles in length, with a breadth at the widest part of about eight miles. Nestled among precipitous mountain-ranges, wooded to the water's edge, with numerous bays and inlets, it has a natural beauty hardly to be surpassed.

From Wairoa there is a formed road to the lake, and twenty-five miles round it, as far as the Oporuahine River.

The principal plains are: (1.) The Ruataniwha, some fifty miles south of Napier. This is 120 square miles in extent, is for the most part occupied as sheep-runs, and carries a large quantity of stock. (2.) The Heretaunga Plain, with an area of ninety square miles, lying immediately to the south of Napier. This is rich alluvial land; a large portion is thickly settled, the remainder used for grazing and agriculture. The only other plain of any extent is at Poverty Bay. It has an area of sixty-five square miles, is very fertile, well cultivated, and has a large population.

The district is well watered throughout by numerous rivers and streams, but none are navigable except the Wairoa and Turanganui, and these only for vessels of light draught. They are both tidal, and serve as ports to the Boroughs of Wairoa and Gisborne.

Communication.

The chief outlets from Napier are three in number. First the Napier-Wellington Railway, which traverses the centre of the southern half of the district for its whole length of 100 miles, and may be called the main artery of communication. Nearly parallel to it throughout runs an excellent gravelled road, which was made before the construction of the railway. On either side there are numerous branch roads, which act as feeders, making a very complete system of internal transit. Another main road runs in a westerly direction to Kuripapango, distant forty-five miles, a favourite resort in the summer time, removed as it is from the heat of the country near the coast. A coach runs thither weekly, and on thence to Inland Patea, where the Napier Road meets the roads to Hunterville, Tokaanu, and the Wanganui River.

The part of the district served by these two main lines—viz., that between Napier and Woodville—contains the greater portion of the population, and from the extent of arable land within it is likely in the future to be very thickly peopled. Notwithstanding that so much of the Native land in that part is unoccupied and in its natural state, there are nearly a million of acres of land in sown grasses.

Napier-Taupo Road.—The road from Napier to Taupo is a fairly good one, though the many hills between Napier and Upper Mohaka, the Mohaka River, and the pumice soil between the river and Taupo render it trying for a cyclist. It is a good coach-road, however, and buggies can be easily driven over it at all seasons of the year.

Napier to Pohui, twenty-six miles, by a good road, though very steep in parts owing to the many hills which have to be surmounted.

Pohui to Tarawera, nineteen miles. Here again the road is extremely hilly for the first six miles to the Mohaka River, though it is fairly level between that river and Tarawera.

Tarawera to Rangitaiki, twenty miles, over a road which is good after rain, but, owing to the pumiceous nature of the soil, very loose and dusty in dry weather.

Rangitaiki to Taupo, twenty-five miles, over a pumice road, level throughout. Starting from Napier by the Port Ahuriri Bridge, over the entrance to the Inner Harbour, the road proceeds for some miles along the shingle bank between the Outer and Inner Harbours, and reaches the pretty village of Petane, seven miles away. After the Petane Hill is surmounted the route is along the Petane Valley—a charming spot, and past the village of Eskdale, situated on the banks of the Esk River. From here to Pohui, where a halt is made to change horses and have lunch, the road winds among hills and some fine pastoral country. Leaving Pohui with fresh horses, a very steep hill remains to be climbed—the Titi-o-kura—before the Mohaka River is reached at Upper Mohaka. Some grand views can be obtained from the summit of the hills between Pohui and Mohaka River, and the beautiful valleys and high ranges traversed *en route* are very picturesque. Tarawera is reached about 6 o'clock, where a stay is made for the night. There is a well-known mineral spring here, and the bush around the township makes it a very attractive place.

Leaving Tarawera early the next morning, the tourist is taken past several objects of interest connected with the early days of the road while it was under construction by the Armed Constabulary. The double waterfall is also passed on the road, and a halt should be made to view it at leisure. Level, rolling plains continue from here right up to Taupo, and there is nothing particular to see before the Rangitaiki River is reached and a halt made for lunch. From there to Taupo, through the Kaingaroa Plains, the road is not interesting, the only objects of interest being the mobs of wild horses frequently met with. Twelve miles from Taupo are the graves of the troopers who were killed at Opepe by the Maoris in 1869. On nearing Taupo the scenery improves; and the first view of the lake, with the mountains of Tongariro (6,458 ft.), Ruapehu (9,175 ft.), and Ngauruhoe (7,515 ft.) in the background, and Tauhara (3,603 ft.) in the foreground, with the numerous clouds of steam ascending from the hot springs in the neighbourhood, make a grand picture. The coach arrives at Taupo about 4 o'clock, where there is a choice of three good hotels. There are hotels at Pohui, Tarawera, Rangitaiki, and Taupo. Good trout-fishing can be obtained in the neighbourhood of the hotels mentioned.

The Napier-Wairoa road is a fairly good coach-road, with the exception of that portion between Petane and Tangoio, and known as the Tangoio wash-out. There is a bi-weekly mail-coach service between the two towns. The contracts for the bridges at Esk River and at the Tongoio Lagoon have been let, and the works to be completed within one year.

From the Wairoa a main road runs northward, through the Village of Tiniroro and on to Gisborne, a distance of seventy-five miles. For a considerable distance it runs through hilly country, and, as it has not been gravelled, wheeled traffic is suspended during the winter months; but a coach runs weekly for nine or ten months out of the year. There is also a road from Wairoa to Gisborne *via* Nuhaka Hot Springs for wheeled traffic.

Between Gisborne and Opotiki, in the Bay of Plenty, communication is not good. The road, which is 120 miles in length, has been formed to the Motu Township, a distance of sixty miles. In the neighbourhood of the forest a large area of Crown lands has been taken up and settled. The rest of the journey must be done on horseback. A railway is being constructed from Gisborne in the direction of Motu. The portion from Gisborne to Otoko, a distance of thirty-two miles, is open for traffic, and another section of five miles will shortly be opened. The continuation of this line will greatly assist the progress of the district.

The country to the north of Gisborne is being rapidly opened up, the coastal road being open for traffic as far as Port Awanui, while several of the arterial roads are being extended, and the road from Waipiro to Te Araroa is now open for wheeled traffic.

Small steamers trade regularly along the coast, calling in at Tolaga and Tokomaru Bays, Waipiro, Tuparoa, Awanui, Kawakawa, and other small bays.

Pastoral Industries.

The Hawke's Bay District is pre-eminently a sheep-grazing country, and the large area of 2,955,603 acres has been improved and sown in English grasses, clover, &c. In 1910 there were 5,647,238 sheep in the district, the number representing more than one-fourth of the total number in the Dominion. The number of bales of wool exported from Hawke's Bay for the year ended the 31st March, 1910, was 89,520, a considerable increase over previous year.

Freezing-works are established at Tomoana, Port Ahuriri, Gisborne, Pakipaki, and Tokomaru Bay on the east coast, and the export of frozen meat for the year ended the 31st March, 1911, from the Port of Napier was as follows: Beef, 4,692 tons, 281,172 carcasses of mutton, 291,228 carcasses of lamb, mutton legs and pieces, 2,509 cwt.; and from the Port of Gisborne for the year ended 31st March, 1911: Beef, 9,447 tons, 306,441 carcasses of mutton, 115,223 carcasses of lamb, 22,187 mutton joints.

Timber Industry.

There was a considerable decrease in the number of mills, and in the annual output. The output was 8,651,000 sup. ft., of which 1,798,313 sup. ft. of sawn and undressed timber were exported from the Port of Napier. The mills now running are not working up to their full capacity, owing to low prices at present obtaining in the district.

Trawling Industry.

There were sixty-five boats of all sizes, including trawlers, licensed during the year 1910, and about one hundred and sixty men are employed in the industry. The fish export is increasing.

Flax Industry.

There are eight flax-mills in the Hawke's Bay District, as follows: Ohuia, 1; Wairoa, 1; Takapau, 2; Waipukurau, 1; Wanstead, 1; Tutira, 1; and Moteo, 1. Last year's output was about 1,735 bales, equivalent to 347 tons. Present prices ruling are from £14 per ton for common quality to £21 per ton for fine quality.

Agricultural Pursuits.

Agriculture is not carried on to the extent it might be with so much land suitable for root and grain crops. No doubt this is due to the profits made in sheep-farming. It is chiefly confined to the Heretaunga Plains and the flat lands near Gisborne. The soil is favourable to root-crops; potatoes range from 6 to 15 tons to the acre, and in some instances exceed this amount. Only a moderate quantity of grain is grown; barley, for which the soil seems well adapted, returning from 20 to 60 bushels of good sample to the acre. There were 43,000 acres in root and green crops, 18,700 acres in corn and pulse crops, 4,754 acres in plantations, 1,065 acres in private gardens, and 384 acres in market-gardens.

The fruit growing and canning industries have now attained some importance. There are large orchards at Hastings and Havelock North, and also vineyards at Te Mata, Taradale, and Greenmeadows. The area in orchard was 2,720 acres, and in vineyards about 165 acres. The Government experimental farm at Aratiki, Havelock North, engaged principally in grape-growing and fruit-testing, is well worth a visit of inspection in the fruit season.

Dairying.

Settlers are now turning their attention to dairying, and factories have been established in the bush districts at Norsewood, Ormondville, Maharahara, Tamaki, Rokai, Hastings, Gisborne, and Woodville, whilst others are in contemplation. At Piripiri, Raumati, and Woodville cheese-factories have been erected, and turn out an excellent article much sought after in other parts of the Dominion. There can be no doubt that the further development of the dairying industry must materially benefit the farming-class—especially the small farmer, who may find it difficult to make a living out of sheep.

Other Industries.

Other industries, such as fellmongers, soap-works, boot, coach, sash and door, and rope and twine factories, &c., are established in the principal towns.

Climate.

The climate is generally of a mild character, and, though hot along the coast-lands in the height of summer, it is owing to the dryness of the atmosphere not so relaxing as in parts of the Island farther north. The rainfall is light, excepting in the bush districts and high inland country.

Napier itself is recommended by many medical men as a resort for invalids suffering from pulmonary complaints, chiefly on account of the mildness of its winter season. The average annual rainfall for thirty-four years is 37.070 in.

Towns.

Napier is pleasantly situated on the peninsula known as Scinde Island, which is joined to the mainland by a narrow shingle-bank several miles in length. It is a busy town, with a population of 10,537. The business part is on the flat land at the foot of the group of hills that take up the greater part of the peninsula. These hills, formerly barren and waste, are now occupied by numerous private residences, and the very general tree-planting has given the upper town a distinctive and pleasing character. There is a good water-supply, derived wholly from artesian wells of large size, and pumped by machinery to reservoirs on the tops of the hills. The shipping trade, as the large exports show, is especially active during the wool and frozen-meat season. It is still carried on at Port Ahutiri, about a mile from the town; but has recently in a large measure been transferred to the fine breakwater which is now partially completed. During the year 1910 the imports amounted in value to £384,595, and the exports to £1,885,939.

Gisborne, the trade-centre and port of what is known as the Poverty Bay District, is a prosperous town of 8,196 inhabitants, exclusive of Maoris, rapidly increasing in size and importance, as the large quantity of unimproved land in the Cook County is fast becoming settled and made productive. It has a good water-supply. There are 2,093,983 sheep in Cook, Waikohu, and Waiapu Counties.

Wairoa, the county town and port of the Wairoa County, is picturesquely situated on the river of that name, about three miles from the mouth. The river is navigable for small craft as far as the village of Frasertown, twelve miles farther up.

With a few exceptions, the towns and villages to the south of Napier are all situated on the line of railway running from that city to Wellington. The principal are: Hastings, a rising town of 6,286 inhabitants, Waipawa, Wai-pukurau, Dannevirke (population 3,368), and finally Woodville (population 1,165), about three miles from the Manawatu Gorge, and distant ninety-five miles from Napier. It is at this end of the district that the Crown has, in the last few years, successfully planted settlement, and, in place of the continuous forest known as the Seventy-mile Bush of earlier days, there are now prosperous townships, with various thriving industries established.

Crown Lands.

The land held by tenants of the Crown, of whom there are 1,452 in the district, under the various systems of tenure, amounts to 920,485 acres, and there remains about 118,274 acres not yet dealt with in any manner.

About one-quarter of this area is fit for agriculture and is suitable for subdivision into small areas, and the balance is only fit for grazing purposes, being mostly broken forest country, fitted more for sheep than cattle, and having an average carrying-capacity, when cleared, of about one sheep to the acre, though the best of it might possibly graze two.

The following is a short description of some of the areas to be dealt with in the future:—

Waiapu County.—11,787 acres.

Which are situated in the following survey districts:—

Mata.—305 acres, undulating pastoral open country, partly in grass and in mixed bush.

Waiapu.—821 acres; soil generally very good; covered with native grasses and light bush.

Tutamoe.—7,570 acres; rough and broken land, rising to an altitude of about 3,000 ft. above sea-level. The soil is fair to good in the valleys and poor on the ridges; all covered with bush.

Matakaoa.—146 acres; hilly country, covered with mixed bush; soil fairly good.

Hikurangi.—2,799 acres; high, rough, bush-clad country, ranging from 2,000 ft. to 4,000 ft. above sea-level; chiefly bush-clad, with tawa and mixed bush in the gullies; formation sandstone and slate.

Raukumara East.—146 acres; rough bush-clad country; no road-access at present.

Waikohu County.—970 acres.

Ngatapa and Waikohu Survey Districts.—970 acres; open grass land, with a little second-growth manuka, and the western portion of mixed bush.

Cook County.—59,033 acres.

Koranga, Ngatapa, Moanui, and Tuahu.—51,851 acres; all heavy bush country, chiefly good mixed bush, with red-birch on the ridges; situated about seventy miles from Gisborne and about forty miles from Opoitiki.

Ngatapa Survey District.—6,616 acres; very broken red-birch country; soil light, mixed with pumice; height from 1,000 ft. to 3,000 ft. above sea-level.

Opoiti Survey District.—486 acres; part open land, covered with fern and scrub; balance consists of hilly country, covered with bush.

Hangaroa Survey District.—80 acres; mostly high fern; tall manuka, with patches of grass; soil fair to good.

Wairoa County.—27,797 acres.

Tuahu Survey District.—6,000 acres; ranging from good tawa bush with easy faces to rough high birch ranges; distant thirty-eight miles from the Port of Wairoa—twenty-seven miles by coach-road and eleven miles by formed pack-track.

Waikaremoana Survey District.—8,568 acres; rough and broken land.

Waitara Survey District.—11,143 acres. Comprises open fern and manuka land; portions in Native and self-sown English grasses; light pumiceous soil.

Tongoio Settlement.—2,086 acres; covered with a good sole of grass, but places have gone back to native pasture and require to be sown. Rat-tail is found on all the sections. To be opened for selection at an early date.

Hawke's Bay County.—3,132 acres.

Pohui and Patoka Survey Districts.—2,832 acres; chiefly forest country, with light soil, part river-bed.

Kidnapper Survey District.—300 acres; long narrow strip of sandhills and sandy beach.

Dannevirke County.—1,702 acres.

Norsewood Survey District.—Piripiri Block, 1,152 acres; bush country, mostly covered with bush; a good proportion undulating land; all well watered.

Norsewood and Tahoraite Survey Districts.—550 acres, being part of Tamaki Block; bush country; all covered with heavy forest; portion is good, flat agricultural land. Now leased for timber-cutting rights.

Waipawa County.—1,750 acres.

Waikarara and Makaretu Survey Districts.—1,750 acres; mostly covered with bush and scrub, high broken country, fair soil and healthy sheep country. Altitude varies from about 1,000 ft. to 3,500 ft. above sea-level.

Patangata County.—12,103 acres.

Motuotaraia Survey District.—33 acres; between Eparaima West and Eparaima Bush; rural sections; a long narrow strip of unoccupied Crown land.

Porangahau Survey District.—12,070 acres; open undulating country partly in grass; is now under survey and will be open for selection within one year.

Native Lands.

Of the Native land in this district, a very considerable portion has been leased to Europeans, but there still remains in the hands of the Maoris a valuable estate, comprising both agricultural and pastoral country, and including some excellent land. This land lies for the most part in the Waipapu County, towards the East Cape.

Thermal Springs.

At Waipiro Bay, Tarawera, and Morere, thermal baths have been constructed, and their medicinal properties are highly spoken of. All these places are now accessible by coach, and the number of visitors, especially in the summer-time, is considerable. A hot spring on the upper reaches of the Mohaka River, and not far from the village of Puketitiri, has been discovered, and a road will shortly be constructed.

THE WELLINGTON LAND DISTRICT.

JAMES MACKENZIE, Commissioner of Crown Lands.

The Wellington District is bounded towards the north by the Auckland District; towards the east by the Hawke's Bay District, to the sea; thence by the sea to the Patea River on the West Coast; and thence bounded towards the west by the Taranaki District. The area contained within these limits is about 6,810,953 acres. It lies, roughly, between the parallels of 39° and 41° 30' south latitude; its greatest length north and south is about 180 miles, and its mean width east, and west about sixty miles.

General Physical Features.

The district is divided into two well-defined parts by a mountain-range, which forms part of the backbone of the North Island. At the northern end this range—there known by the name of Ruahine, and averaging a height of about 4,000 ft.—divides Wellington from Hawke's Bay; but after passing the gorge where it is intersected by the Manawatu River, the range takes the name of Tararua for many miles, until, at about forty miles from the termination on the shores of Cook Strait, it divides into two main ranges, known respectively under the general names of Rimutaka and Tararua, both ranges averaging from 2,500 ft. to 3,500 ft. in height, the highest point being 5,154 ft. Parallel to the main range, and divided from it by the Wairarapa Plain and the undulating country to the north, is a series of ranges at a few miles inland from the east coast, known as the Puketoi, Taipo, Maungaraki, and Haurangi Ranges. Lying on the northern border of the district are the Kaimanawa Ranges, for the most part open and grass-covered, rising to a mean height of about 4,500 ft. Westward from the latter mountains, and divided from them by a deep, broad valley, in which flow the Waikato and Wangaehu Rivers, is the volcanic chain of mountains containing Ruapehu, 9,175 ft., and Ngauruhoe, an active volcano, 7,515 ft. high. The long

sweeping curve of Cook Strait, forming the south-western limit of the district, is bordered, from the Patea River to within thirty miles of Wellington, by a comparatively level and undulating country, now nearly all under cultivation, having an average width of about fifteen miles. This is one of the finest parts of the Dominion, and is celebrated for its stock-raising capabilities. It was originally in a great measure open, though the southern part, where the plain is narrowed in between the sea and the Tararua Range, had a good deal of forest in it.

Inland of this coastal plain, at varying distances from the sea, the country gradually rises to a mean height of about 1,500 ft. to 1,800 ft., and becomes a good deal broken in character. It was originally forest-clad almost throughout. It is much cut up by rivers and streams flowing from the interior to the sea, of which the principal, commencing from the north, are these: the Waitotara, the Wanganui, the Wangahua, the Rangitikei, the Oroua, the Pohangina, and the Manawatu, which last, after leaving the gorge in the Ruahine Ranges, runs through level land to its mouth in Cook Strait. This broken country, being everywhere composed of papa or marly formation, which takes grass excellently, promises in the near future to be a large sheep-carrying district.

At about fifteen miles south of the volcanic peaks of Ruapehu Mountain the papa country terminates in a fairly well-marked escarpment, giving place to a more level and undulating country formed of volcanic matter, the greater portion of which is forest-clad, though on the south-east, east, and west sides of that mountain there are open grassy plains, of no great fertility, but yet suited to pastoral pursuits.

To the eastward of the main range formed by the Rimutaka and Tararua Ranges is the great depression known at its southern end as the Wairarapa Plain, which gradually rises northwards from the lake of that name into somewhat broken country, of no great height, at a distance of some forty-five miles from the sea. From here the country falls again slightly to the Upper Manawatu River, the depression in this part being marked by the extensive flats in the neighbourhood of Pahiatua, and by the shallow valleys of the Mangahao, Mangatainoka, and Tiraumea Rivers and their branches. For thirty miles from the sea this great valley is mostly open, with patches of forest here and there, but becomes more plentifully wooded at the base of the Rimutaka and Tararua Ranges. The quality of the soil varies from light and stony on the Wairarapa Plains proper to rich papa country as the northern end is approached. The southern end of this country is watered by the Ruamahanga River and its tributaries. Generally the district is a pastoral one, though agriculture is also pursued successfully. The neighbourhood of the Puketoi Ranges is in many places composed of limestone, and promises in the future to become a very rich pastoral district, such as will support a considerable population. In the forks formed by the Tararua and Rimutaka Ranges the Hutt River takes its rise, and runs in a southerly direction through an undulating or level country, finally falling into Port Nicholson. The valley contains some very fine land, generally held in small holdings.

Plains.

The two most important of these have already been mentioned. On the eastern side of the main range the Wairarapa extends northward from the lake of that name for about forty-seven miles, with an average width of about nine miles. In some parts, especially on the flats along the Ruamahanga River, the soil is alluvial and rich; in others, though stony and unfit for cultivation, it is nevertheless grassed, and carries stock well in the winter and rainy seasons. The plain is watered by the Waiohine, Waingawa, and Ruamahanga Rivers, and contains altogether about 200,000 acres, much of which is good agricultural land. On the other side of the district, west of the Tararua and Ruahine Ranges, there is a large block of land so nearly level that it may be called a plain, extending from Paekakariki (twenty-seven miles from Wellington) to Marton (a few miles north of the Rangitikei River), and contains about half a million acres. Starting as a narrow strip between the hills and the sea, the plain widens out by degrees until at Feilding it is at least twenty miles in breadth. Along the beach runs a fringe

of sandhills, but behind this is to be found some of the best farming and grazing land in the Dominion. There are two plains inland—Murimotu and Waimarino—both lying some 2,200 ft. above sea-level, in the neighbourhood of Mount Ruapehu, the former to the south and the latter to the north-west of the mountain. The soil is covered with a coarse native tussock, and, though capable of carrying stock, is of a light porous nature, and cannot be classed as agricultural land.

Rivers.

First among these is the Wanganui, with a length of 136 miles from its source, near Mount Tongariro, to its outlet. The Manawatu is next in importance. Rising in the Ruahine Range, it flows through the picturesque Manawatu Gorge, joining the sea at the Port of Foxton. The Rangitikei, the third in size, rises in the Kaimanawa and Ruahine Mountains, and flows through the Awarua country, where it is joined by the Hautapu and other large tributaries. After a course of over a hundred miles it reaches the sea some little distance below the Township of Bull's, on the west coast. Lesser rivers on the west coast are the Waitotara (north of Wanganui), the Wangachu (which takes its rise in Mount Ruapehu, and from its source to its mouth is so strongly impregnated with sulphur that fish cannot live in it), the Turakina, and the Otaki. The only other rivers of any size are the Hutt (Heretaunga), emptying itself into the Wellington Harbour; the Ruamahanga, flowing through the Wairarapa Valley and lakes into Palliser Bay; and on the east coast the Pahaoa, Aohanga, and Akitio.

Lakes.

The only lake of any size in the Wellington District is the Wairarapa, lying between the Rimutaka and Haurangi Ranges, towards the southern end of the Wairarapa Valley. It is about twelve miles long and four broad, and is connected by the Ruamahanga River with Onoke, a small lake separated from Palliser Bay by a narrow shingle-spit only. A passage through the spit is opened from time to time when the lake rises above its natural level and overflows the low-lying flats along its margin. Water-fowl of every kind—among them numbers of black swans—are to be found round about these lakes.

Scenery.

The views obtained from the railway-line in the ascent and descent of the Rimutaka Range are still among the best in the neighbourhood of Wellington though bush fires have done much damage, and the road through the Forty-mile Bush was long considered one of the most beautiful drives in the North Island; but its beauty has been diminished by the felling of the bush consequent on the increase of settlement. The same may be said of the Manawatu Gorge, famed in the old coaching days for its lovely scenery, but now sadly marred by the construction of the railway-line. The most beautiful drive now left is through the Awarua Bush, from Ohingaiti to Moawhango. From this road, as it winds round the spurs, most charming glimpses are obtained of the Rangitikei River and the blue hills beyond, and at other points the traveller looks up deep ravines where the graceful fern-tree stands out in bright relief against the dark green of the native bush. Another road, from Pipiriki, on the Wanganui River, to the Murimotu Plain, traverses one of the most magnificent forests in the North Island. Here the bushman's axe has felled only the timber standing on the road-line, and the track runs beneath the shade of the largest and stateliest maire and rimu known. Beautiful as these drives are, the scenery on the Wanganui River is still more lovely. A few miles below Taumarunui the river enters a series of gorges, shut in by high precipitous cliffs. Sometimes the canoe glides slowly through quiet reaches, sometimes shoots rapids which make the traveller hold his breath till they are passed, and then again traverses places where the water is ever in turmoil, boiling and eddying in whirlpools, taxing the energies of the most skilful Native steersman, and testing the nerve of the most courageous tourist. These ex-

periences, with the views obtained of the banks, densely wooded even where the papa rock rises almost straight from the water's edge, make the eighty-four miles journey from Taumarunui to Pipiriki an event not easily effaced from the memory. Between Pipiriki and Wanganui excellent steamers are now running, so that the beauties of the lower part of the river may be seen by all without trouble or discomfort. In summer-time a launch goes as far as Taumarunui three times a week with the convenience of a house-boat at Ohura, where the night is passed on the upward trip.

Some of the finest bush scenery in the Dominion has now been rendered accessible to travellers by the opening of the Main Trunk line. That portion between Mangaweka and Utiku is truly magnificent, the line being cut out of steep rugged cliffs along the Rangitikei and Hautapu Rivers. Farther north the line passes through the Waimarino forests, rich in magnificent milling-timber, and the Waimarino Plains, from which there is a splendid view of Ruapehu, Tongariro, and Ngauruhoe Mountains. From here the railway passes to the Raurimu Spiral, an engineering triumph, which enables the line to rise some 700 ft. in about two miles.

Forests.

The Wellington District until quite recently was essentially a forest-country, but out of the 6,810,953 acres contained within its borders there are now not more than 2,616,000 acres under bush. By far the largest forest is the Waimarino, having an area of at least three-quarter million acres, a portion of it being nearly level land, containing magnificent timber, principally rimu, matai, totara, maire, and other pines. This forest is as yet hardly touched, though timber is being cut at Raetihi for the settlers now making their homes in the neighbourhood. A very efficiently equipped Government sawmill has been working at Kakahi for some time, and supplying all the totara required by the Public Works Department for the railway-works in the vicinity, and a sawmill at Piriaka is cutting bush on a Native reserve.

There is a large extent of bush land, drained by the Turakina, Mangamahu, and Wangaehu Rivers, extending up to the Wanganui River, and containing about 300,000 acres. Very little of this, from its inaccessibility, will be utilized for saw-milling purposes, but a great deal of it, together with a further block of 230,000 acres on the west side of the Wanganui River, will be cleared by the settlers and sown down with grass. A further block of about 100,000 acres of forest land lies in the Pohangina Valley and on the slopes of the Ruahine Range. A large portion of this has been taken up and is now being settled.

The Awarua Block, extending on both sides of the Rangitikei River and to the summit of the dividing range, is covered with heavy bush on the lower slopes. The portion which has been sold by the Government for settlement purposes is being cleared by the settlers; but there is a large amount of very valuable milling-timber still standing in the neighbourhood of Taihape, where several sawmills are busily engaged. The timber on the east side of the Rangitikei River, reserved for milling by the Crown, is untouched.

The forest land on the west coast extends from Pukerua to the Manawatu Gorge, on the west side of the Tararua Range, and contains an area of about 300,000 acres, the bulk of it being fit only for turning into pasture. The most available part of it, alongside the Wellington-Manawatu Railway, has been almost cut out by sawmillers at Levin and other places on the line.

After this in size is the forest on the eastern slopes of the Tararua Ranges, extending from Featherston to the Manawatu Gorge, which includes what remains of the well-known Forty-mile Bush, containing probably about 175,000 acres. This area is being quickly denuded of timber by sawmillers and by settlers. A tract of about 50,000 acres lying to the east of the Puketoi Range cannot be utilized for milling purposes, as it is not tapped by any branch railway-line, and its distance from the main line would probably render the business unprofitable except for local purposes. Nor are there any suitable ports along the coast where timber could be shipped.

The other forests are, one near Lake Taupo, and the Haurangi Forest on the east side of the Wairarapa Lake. The former contains some valuable milling-timber, principally matai and maire, and the latter consists for the most part of beech-covered hills, and cannot be considered as valuable for milling purposes.

Soil.

It may be said that the Wellington Land District contains within its borders a greater quantity of good land than any other in the North Island, very little, except the mountain-tops, being unfitted for use, while some of it is of very superior quality, suited for the growth of the productions of every temperate climate. A considerable portion of it is still forest-clad, and large areas have only recently been cleared, so that grazing, for which the climate and soil is admirably adapted, will be the principal industry for some time to come, as it takes from ten to fifteen years before the plough can be used in bush-lands. It is generally calculated that the cost of felling and burning ordinary bush varies from 25s. to 35s. an acre. To this must be added about 20s. for seed and fencing. It is no uncommon thing for a return to be received at from twelve to eighteen months after felling. The usual practice is to put sheep on to the new lands soon after the grass has obtained a good hold. The process of improving the lands by the gradual "logging up" and burning of the fallen tree-trunks is a long one, but it pays in the end, for in this way fine pasture-lands are obtained on the hills, and agricultural lands on the flats.

Climate.

The climate of Wellington District is healthy and mild, the mean annual temperature (in the city) being about 55°, whilst the mean rainfall is about 50 in. per annum; and for the year 1910 the mean temperature was 56·2°, the mean maximum temperature was 61·4°, and the mean minimum was 51·0°. The total rainfall was 45·42 in. on 161 days, while for the corresponding previous twelve months the rainfall was 38·88 in. on 160 days. The rainfall differs, however, according to locality. Inland and near the ranges it is much greater. The top of Ruapehu Mountain is covered with perpetual snow, which lies also on the tops of Kaimanawa, Ruahine, and Tararua in the winter. Frosts are heavy in the interior.

Harbours and Ports.

The coasts of Wellington are not so well supplied in this respect as are some other parts of the Dominion; but what is lost in number is made up in a great measure by the excellence of the chief haven—Port Nicholson—which, from the position it occupies, at the meeting-point, as it were, of the coastal traffic of both Islands, and from its sheltered position and depth of water, may be considered one of the most convenient harbours in the world. The Wanganui River, which has been considerably improved by artificial means, is the second port in the district, and has a considerable trade carried on by coastal steamers. The Patea and Manawatu Rivers are also used by coastal steamers, whilst several other inlets along the West Coast afford shelter and stopping-places, according to the direction of the wind. The extension of railways along both coasts has, in a large measure, done away with the inconveniences arising from want of harbours.

Towns.

The capital of the Dominion—Wellington—is situated in the south-west angle of Port Nicholson, on Lambton Harbour, and from there it extends southwards to the open Straits at Island Bay. It was founded in 1840 by the New Zealand Company. The original shore-line fronting the harbour has long since been obliterated by reclamation, which is continually being added to, and is now mostly covered with fine buildings. The City now includes Roseneath, Kilbirnie, Melrose, Island Bay, Vogeltown, Brooklyn, Mitchelltown, Taitville, and parts of Wadestown and Karori, the population on 2nd April, 1911, being 64,372. Including suburbs the population at that date was 70,729. The harbour is land-locked, contains an area of about 20,000 acres,

and varies in depth from six to fourteen fathoms, with good anchorage, the bottom being silty clay and sand. The width of entrance at narrowest part is 3,600 ft., with a depth of 7 to 8 fathoms; the current never exceeds 2 knots; the rise and fall of the tide varies from 3 ft. to 5 ft. There is no bar at the entrance to the harbour, and vessels can enter inwards or outwards in all weather and at all states of the tide. There is a fixed white light at Pencarrow Head, on east side of entrance, at a height of 322 ft., visible for twenty-five miles. There has also been erected at foot of Pencarrow, 32 ft. above the water, a lighted beacon, which defines the entrance to the harbour in thick weather when the high light may be obscured by fog. The fixed light on Somes Island, within the harbour and six miles from Pencarrow, is 95 ft. above sea-level, and is visible for sixteen miles. It has a white sector fixing the entrance-passage. A lighted buoy has been placed on the Falcon Shoal in the harbour-entrance and another off Point Jerningham, within the harbour. Both are visible all round at a distance of five miles. The Falcon Shoal is now being removed by dredging to provide a clear entrance, having a depth of seven fathoms at low water. The outer signal-station on Beacon Hill, near the Heads, on the west side of the entrance, signals all vessels as soon as distinguished, and these are repeated at the inner signal-station on Mount Victoria for the information of the townspeople. The Beacon Hill Station is connected to the city public telephone exchange.

The total wharf-accommodation for berthing vessels amounts to 14,441 ft. in town and 2,096 ft. in suburbs, with depths of water ranging from 16 ft. to 33 ft. The Harbour Board has a complete and elaborate system of hydraulic plant, comprising some fifty-six cranes (fixed and movable) with variable rakes up to 32 ft. and 50 ft., and lifts of from two to thirty-five tons. There are also movable winches and sundry smaller hydraulic plant in the sheds and stores. Storage-sheds are available for cargo discharging from or loading at any berth, and have an area of 342,027 square feet of floor-space, with a cubic capacity of 6,430,722 ft. There is also a patent slip, owned by a private company, that can take vessels up to 2,000 tons, not exceeding in length 300 ft., or greater draught than 16 ft. at forward end when going on to slip. The ways are laid to a gradient of 1 in 23, and are 1,070 ft. in length at high water, with a depth of 32 ft. at outer end. This slip is situated at Evans Bay, some two miles and a half from the wharves. There are also several foundries and sawmills available to carry out any repairs required. For the year ending 30th September, 1910, 3,486 vessels, of a registered tonnage of 2,901, entered the port. The tonnage of goods passing over the wharves during the same twelve months, inwards and transhipments, amounted to 435,439 tons of general goods; and 161,265 tons were also shipped outwards, as well as 252,332 bales of wool, hemp, and tow. Coal amounted to 149,892 tons. Timber: Inwards, 13,099,854 superficial feet; outwards, 1,469,333 superficial feet. The value of imports for same period amounted to £4,130,225, and the exports to £4,362,413. The Harbour Board has a large dredge capable of dredging down to 42 ft. at low water, and it is arranged so as to deliver the material at sea or to pump it ashore for reclamation purposes. The Board has large schemes of reclamation in hand, partly with a view of obtaining revenue by letting and partly in connection with schemes of wharf-accommodation, and to give road and railway approaches to the new wharves. The Board's revenue on working account last year was £180,876, and its working expenditure amounted to £135,367, in addition to which £35,243 was written off for depreciation on structures. The total cost on capital expenditure since the Board's inception in 1881 has been £1,212,244, its loan indebtedness at the 30th September, 1910, was £742,000, and it has an estimated balance of assets over liabilities of £359,662.

Being the seat of Government, the city contains the Houses of Parliament,* the residence of the Governor, and the headquarters of the Government Depart-

* Owing to the destruction of the Houses of Parliament by fire in 1907, Parliament is held in Government House, which has been altered to meet requirements, and a new Government House has been erected on Mount View, Wellington.

ments, which last are placed in what is said to be the largest wooden building in the Southern Hemisphere. There are several noticeable public buildings, amongst which must be mentioned the Public Trust Building, the General Post Office, Government Life Insurance Offices, Government Printing Office, Government Railway Offices, Customhouse, Public Library, with a flourishing branch at Newtown, with the commencement of a natural history museum attached, School of Art, Town Hall, and Harbour Board Offices. The Colonial Museum and the Botanical Gardens are also worthy of notice. The city now has plenty of open spaces for recreation purposes, several of which have been formed by cutting down hill-tops and filling in valleys with the spoil. Besides the Botanical Gardens there are Newtown Park, where is placed the nucleus of a zoological collection, the Basin Reserve much used for cricket during the summer, the Sydney Street, Kelburne, and Duppa Street recreation-grounds, all artificially formed and grassed ready for use. The city is lighted by gas and electricity, and extensions of the latter to the outlying districts of Melrose are now in hand. The privately owned plant for the production and distribution of electricity has been taken over by the Corporation. The principal streets are paved with wooden blocks. An excellent supply of water is obtained from the Wainui-o-mata River, on the other side of the harbour, and from the Kaiwarrawarra Stream, at Karori to the westward. The drainage is very complete in the principal part of the city, and it is now being extended to the outlying portions. A system of electric trams has been installed, and extended to Brooklyn, Island Bay, Karori, Kilmirnie, Miramar, Seatoun, and Wadestown. The principal industries are represented by iron and brass foundries, sawmills, soap and candle works, boot-factories, aerated-water and meat-freezing works, coachbuilding, rope and twine works, sash and door factories, brick, tile, and pottery works, printing and publishing offices, besides match and box factories, and other similar works of various kinds. The city is increasing with rapid strides; its excellent position, together with the fine back-country, places it in the front rank of New Zealand towns. The railway-line to the Hutt Valley has been straightened and duplicated to afford greater facilities to transit, which are necessary in consequence of the rapid development of population. The following are the principal suburbs:—

Karori, which lies immediately to the west of Wellington, at an elevation of about 600 ft., has a particularly bracing and salubrious climate, and is one of the principal suburbs of the city, with which it is connected by an electric-tram service. The public cemetery there is the chief burial ground for the City of Wellington. Recently there has been erected an up-to-date crematorium. There are two churches, a public library, post and telephone office, and several shops. The reservoirs in the borough form part of the city water-supply. The streets are lighted with electricity, and many of the dwellings are also connected. There is a recreation-ground of 54½ acres, laid out with playing-grounds for football, hockey, and cricket, with separate tennis and bowling club grounds.

Khandallah, on the Wellington-Manawatu Railway, and distant about four miles from Wellington, is another rising suburb. It is lit by electricity, and contains three churches, a public school, a public hall, and a telephone bureau and post-office, from which there is a daily postal delivery, also a general store. The local authorities have lately acquired the watershed area near by to provide the town in the future with a plentiful water-supply. The town is very fortunate in having a beautiful public domain, under the control of the Onslow Borough Council. There is also a tennis club and bowling-green.

Ngaio, on the Wellington-Manawatu Railway, and immediately adjoining Wellington, is one of the most progressive suburbs of the city. Besides two churches and a public school, Ngaio contains numerous elegant private residences, post and telephone office, from which there is a daily postal delivery, and a store. The streets are lit by electricity, and the adjoining country affords a splendid scope for future development.

Kaiwarrawarra, one mile from Wellington, on the Wellington-Napier Railway, is one of the industrial suburbs of the city. There are soap-works, a candle-factory, a fellmongery, and a large foundry has recently been established there.

The town also contains a post-office and two stores. It is lit by electricity, and obtains its water-supply from the city mains.

Miramar, an outlying borough, occupies the whole of what used to be called Watt's Peninsula, forming the western coast of the Port Nicholson Harbour entrance. It is connected with the city by electric-tram and ferry-boat services, and contains extensive recreation-grounds, used for football, hockey, polo, and golf. It is lighted by electricity, and gasworks are now in course of construction; it has a post and telegraph office and telephone bureau, as well as several stores. Many fine residences have been built or are in course of erection. The signalling-station on Beacon Hill, and forts guarding the harbour-entrance, are within the borough.

Seatoun and Karaka Bay, portions of the borough, are popular seaside resorts, and have also a considerable fixed population.

Rona Bay and Muritai, comprising the Eastbourne Borough, on the eastern side of the harbour, are pleasant residential suburbs of Wellington, and extremely popular seaside resorts, connected by ferry-boat service with the city. The population of the borough fluctuates from about 600 in winter to 1,000 or more in summer. It has a post and telegraph office, from which there is a daily delivery, telephone bureau, and several stores. At Muritai there is an extensive domain and a recreation reserve, also tennis-courts, &c.

Lowry Bay, on the eastern side of the harbour, is becoming a residential suburb: there are several fine residences there, and it is a popular picnic place.

Day's Bay, also on the eastern side of the harbour, is a popular seaside resort, and a residential suburb, connected by an excellent ferry-boat service with the city. It has a splendid beach and some 700 acres of fine bush, grounds laid out for tennis and hockey, also a water-chute. There is a post-office, telephone bureau, first-class accommodation-house, and a store.

Johnsonville, seven miles from Wellington by the Wellington and Manawatu Railway, is a town district with a population of 929 persons. There are four churches, a post-office, a public-school, police-station, several stores, and a recreation-ground. This suburban township is expanding, and the Hawtrey Estate, which has been subdivided by the Government into 108 residential sections, adjoins the northern boundary.

Petone is situated along the northern shore of Port Nicholson, seven miles from Wellington by the railway. It has a population of 6,640, and contains twenty factories, including the Government Railway Workshops, a woollen-factory, the Gear Company's Meat Preserving and Freezing Works (one of the most modern and comprehensive establishments for this industry in the Southern Hemisphere), two sawmills, and a printing-office (which issues a tri-weekly newspaper), &c. The water-supply is by gravitation from a reservoir about two miles and a half distant on the Korokoro Hills. The system of drainage is by gravitation and night cartage, and refuse is collected and buried. There are three State schools, a district high school, technical school, and a private school, also municipal offices, public library and reading-room, and four hotels. The borough owns the gasworks, and supplies gas to the adjacent Borough of Lower Hutt, in addition to the local consumption. The recreation-grounds are 30 acres in extent, with grandstand and band-rotunda.

The Lower Hutt, almost immediately adjoining, has a population of 4,240. The water-supply is artesian, the water from ten bores being pumped to a reservoir in the adjoining hills, from which it is supplied by gravitation. A loan for a pumping and gravitation scheme of sewage-drainage has been authorized, and the work is now in progress. There are four hotels, three manufactories, two sawmills, a State school, a district high school, a Roman Catholic school, and several private schools. The public buildings are a railway-station, police-station, new police court, municipal offices, library and free reading-room, and a post-office with clock and chiming bells. Two recreation-grounds lie within the borough, and the public are admitted to Bellevue and Mason's gardens on payment of a small entrance fee. Upper Hutt Town District on the Wellington-Napier Railway, twenty-one miles from the capital, is the centre of a

flourishing district, which has gone ahead rapidly in the past few years. The town district contains two hotels, two churches, recreation-ground, public pound, police-station, town board office, and post-office, from which there is a daily delivery. The surrounding country has many small dairy farms, owned by some of the very early settlers, who supply milk to the city.

At Trentham is the racecourse, headquarters of the Wellington Racing Club, fine golf-links with a large club-house, a very completely equipped rifle range, and the Government's pathological laboratory. In the vicinity many attractive residence have recently been built, and others are in course of erection, as well as week-end houses owned by residents in the city.

Featherston, situated in the Wairarapa Valley, forty-six miles by rail from Wellington, is a small township, with butter and cheese factories in the neighbourhood. The population is 743, with three churches, two hotels, two banks, post and telegraph office, a state school, town hall, courthouse, town board office, and literary institute. A gravitation water-supply has been installed. There is a public domain and special grounds for various sports. At Tauherenikau the Wairarapa Racing Club has a beautiful course. Roads lead from Featherston to Martinborough and the east coast, and also down the Wairarapa Valley to Lake Ferry on Palliser Bay, which is becoming a favourite seaside resort.

Greytown is situated three miles off the main line of railway, with which it is connected by a branch line, and near the middle of the Wairarapa Valley, fifty-four miles from Wellington by rail. The population is 1,042, with three hotels, two manufactories, a bank, a State and high school, technical school, also a public library and reading-room, post-office, town hall, railway-station, and municipal council chambers. Water is brought in from the Waiohine River, but there is no drainage system. The refuse, &c., is removed by contract. There is also a 10-acre recreation reserve. Fruit-growing on a considerable scale has been started in the vicinity.

Martinborough lies near the eastern side of the Wairarapa Plain, and is some 11½ miles from Featherston, the nearest railway-station on the Wellington-Napier railway-line, and is a flourishing little town of some 631 inhabitants, with every prospect of increasing its population within the next few years, having a good and extensive back country, capable of carrying a large number of people. There are two good-sized hotels and a good boardinghouse, four manufactories, a State school, post and telegraph office, courthouse, public library, town hall, county council offices, and three banks, also recreation-ground and the Jockey Club's course. There is a gravitation water-supply.

Carterton, the centre of a large dairying district, has a population of 1,546 persons. There are four co-operative cheese-factories and three proprietary factories in the immediate vicinity, the total output of cheese being about 1,000 tons per annum. A high-pressure water-service is provided, with open water-races for the suburban lands, and the Council has installed a coal-gas plant at a cost of £5,000. Drainage is by the septic-tank system in a special area, and the rubbish is carted to a depot. There are three hotels, four schools (including one high, one primary, and two private ones), post-office, courthouse, a hall, a library with free reading-room, &c., two banks, also a brick and tile factory on the boundary of the borough, a tannery, three sawmills, and five factories in the neighbourhood. The recreation-grounds cover about 16 acres. The Wairarapa and East Coast Pastoral and Agricultural Society holds its annual show here.

Masterton is situated at the head of the Wairarapa Valley, on the Wellington-Napier Railway, sixty-seven miles from the capital. It is the centre of an agricultural and pastoral country, and has a population of 5,182. There are numerous manufactories, two State schools, including a district high school, Roman Catholic convent, two private schools, and a technical school; the public buildings being a town hall, public library and reading-room, post-office, courthouse, also municipal and county council offices, railway-station, four banks, &c.; a public park of about 30 acres, with sports-ground and grandstand, &c.; also a school recreation-ground of 3 acres, and large fish-hatcheries. Two daily news-

papers are published. The water-supply is by gravitation, the system of drainage being by septic tank with sewage-farm. Rubbish is carted to a depot, and there are also some small private destructors. The town is lit with gas. An important coach-road leads from here through a fine pastoral district to Ti Nui, and on to Castlepoint on the east coast, where a large quantity of wool is annually shipped to Wellington for export. From Masterton there is good access to Mount Houldsworth, *via* Fernridge. This peak is 4,835 ft. in height, and a splendid view is obtainable from the summit. There is a mountain cottage with excellent accommodation for travellers.

North of Masterton is the Opaki Plain, and beyond is the entrance of the once famous Forty-mile Bush, which is now a thriving pastoral, agricultural, and dairying district. Butter-factories have been established at numerous centres.

Eketahuna is, by rail and road, eighty-nine miles from Wellington. From there a main road leads to Alfredton and up the Tiraumea Valley, through the East Puketoi country, to Weber and Dannevirke, the latter on the Napier railway-line. The population is 806, with two banks, twelve manufactories, a State school, four churches, post-office, courthouse, railway-station, town hall, and two recreation-grounds. There is no water-supply, but a sewage system of drainage is partly installed; rubbish and refuse are buried. Electric light is now installed.

Pahiatua, a township eighteen miles beyond Eketahuna, has a population of 1,358. The number of hotels is four, manufactories thirty, with district high and public schools, and also a convent school. The public buildings are—Courthouse, post-office, public library, drill-shed, three banks, Foresters Hall, &c. There is an eight-acre recreation reserve, a gravitation water-supply, gas lighting, and a septic tank for drainage. It is the county and market town of a large and improving district, and is the centre of a large dairying industry. Several branch roads run from Pahiatua into the adjoining country, the principal one leading to Makuri through a beautifully wooded gorge. From there another branch road passes over the Makuri saddle into the East Puketoi country. Excellent fishing is obtainable in the neighbourhood.

Porirua, on the west coast, thirteen miles from Wellington by the Wellington-Manawatu Railway, is on the Porirua Harbour. It has a post and telegraph office, store, and hotel. Here also is the extensive Porirua Mental Hospital. At the head of the harbour is Pahautanui (or more correctly Paua-taha-nui), the centre of a small agricultural community of early settlers, the old coach-road to the west coast running through it, and a branch road leading to Hayward's, in the Hutt Valley. It has post and telegraph office, hotel and stores, two churches, and State school. Plimmerton, on the coast to the north of the harbour, eighteen miles from Wellington, is a very popular seaside resort. Near Plimmerton, on the sandhills and about a mile south, lies a large boulder known to Native tradition as "Te Punga o Matahourua"—the anchor of "Matahourua," one of the canoes bringing the original Maori inhabitants to the island. Paekakariki, twenty-seven miles from Wellington, is, on account of its fine beach and equable climate, also a very popular seaside resort. Besides some fine residences it has a large hotel, a public hall, State school, a church, and two stores. It may be considered a commencing-point of the west coast settlements, which are springing up in every available valley along the coast.

Titahi Bay, situated on the open strait immediately opposite Mana Island, is one of the most beautiful seaside resorts round Wellington, and from its situation the beach is exceptionally well sheltered. Access is by coach from Porirua, about three miles and a half distant, a good service being maintained. There is a telephone bureau, postal receiving-office, and an excellent accommodation-house at the bay.

Kapiti Island, about three miles and a half off the west coast, is reserved by the Crown for the preservation of Native flora and fauna. Its area is about 5,000 acres.

Otaki is forty-seven miles from Wellington by rail and road. There are five hotels, five manufactories, a State school, a Roman Catholic and a Maori

school; also a railway-station, post-office, hospital, town hall, Masonic hall, a sanatorium for consumptives, a public library, and several other public buildings; but the township has neither a water-supply nor a drainage system, the refuse being removed by contract and buried. The rainfall during 1910 was 36.29 in., and fell on 183 days. There are 331 homesteads in the Otaki Road District, and the population, including that of Otaki and of Manukau townships, is 1,579 persons. The climate is very mild; lemons, oranges, figs, and grapes grow well in the open.

Levin, proclaimed a borough in 1906, has a population of 1,608 persons. The water-supply is by gravitation. Drainage is by a system of open drains. Rubbish is carted to a rubbish and nightsoil depot. There are two hotels, eight manufactories, and two sawmills, a State school, a district high school, two post-offices, courthouse, municipal buildings, also two recreation-grounds. Municipal gasworks have recently been erected.

At Manakau and Shannon thriving townships have arisen since the Manawatu Railway Company opened up the land round about, much of it being rich farming and grazing country. Between Shannon and the Manawatu River there is a large raupo or flax swamp, named Makurerua, containing at least 15,000 acres of fine alluvial soil, which is nearly all drained, and will probably at some future period become grazing-land. A large flax-mill has recently been established there.

Foxton, a borough at the mouth of the Manawatu River, a small shipping-port, contains 1,637 inhabitants, four hotels, seven flax-mills, a State school, a public library, and a public park. There is no water-supply and no drainage system, refuse being removed by cart to a depot outside the borough. A trial bore is now being put down to see if artesian water is obtainable. It is connected with Palmerston North by a branch railway, and is the outlet for a large area of good agricultural land, with a considerable flax-milling industry. The Foxton Wharf is 512 ft. long, and the railway runs down it. The harbour light is white, and visible for six miles seaward in ordinary weather. The depth of water on the bar at high water, spring tides, is about 11 ft., and at high water, neap tides, about 8 ft. From the mouth of the river to the wharf—some six miles—the water on the flats is about the same depth. Vessels can lie afloat at the wharves at all times, but they can only work the port with a flowing tide and in favourable weather. Messrs. Levin and Co. have a river service consisting of five steam-launches and a number of punts, which are employed in supplying the numerous flax-mills on the river with raw material, and also in bringing down fibre to Foxton for shipment. There are a rope and twine manufactory and seven flax-mills. The Manawatu Heads are distant by road some three miles, and are a favourite summer resort of the residents of Palmerston North and other parts of the Manawatu district. There are about thirty houses at the Heads. Direct railway-communication between Marton and this port would enable the wool and timber from the Rangitikei and other up-country districts to reach the sea-board for shipment with the shortest possible land carriage. A Harbour Board has recently been formed to foster the development of the port.

Palmerston North is an inland town at the junction of the Wellington-New Plymouth, and Palmerston-Napier Railways, situated on a fine plain in the midst of a most excellent farming district, at a point eighty-seven miles from Wellington and 112 miles from Napier. The population is 10,991. The town is lit with gas, and has a gravitation water-supply and septic-tank system of drainage. The refuse is burnt on the river-bank. There are fifteen hotels and 250 manufactories of all sorts, and three State schools, a high school, four private schools, two Catholic schools and a convent. The public buildings are—Courthouse, post-office, opera house, library, municipal buildings, hospital, and railway-station. There are recreation grounds, a public domain, and show-grounds, where the Manawatu Agricultural and Pastoral Association holds its annual show. The rainfall during 1910 amounted to 36.55 in., and fell on 121 days. A fine bridge across the Manawatu River connects it with the Fitzherbert Block, a tract of rich agricultural

land. Nine miles from Palmerston is the Township of Ashhurst, at the mouth of the Pohangina Valley, up which settlement has now extended for a distance of twenty-two miles. Several large farm homestead association blocks have been selected up this valley.

Feilding is ninety-nine miles from Wellington by rail. The population is 3,161, and there are four hotels, two State schools, a Catholic school, a technical school, also a post-office, courthouse, municipal chambers, drill hall, theatre, skating-rink, railway-station, recreation-grounds, two public squares, fresh-water swimming-baths, public library, &c. Stock sales are held every Friday. There is a gravitation water-supply. The drainage system is by gravitation in a septic tank, and the rubbish is removed to the borough depot. The rainfall during 1910 was 38.35 in., and fell on 145 days. Feilding is one of the most important towns on the west coast, as it is the centre of a very fine locality and the outlet for a large tract of inland farming and agricultural country, the forest on which is fast being felled. A coach-road connects it with Birmingham (Kimbolton) and Pemberton, about thirty-two miles distant. On the seaward side for a distance of twenty miles there is also much good agricultural land, extending to the north-west to the Rangitikei River, and including the Township of Halcombe. Several dairy factories have been established in the neighbourhood.

Marton, 116 miles from Wellington by rail, is the junction of the Main Trunk and the Wellington-New Plymouth Railways. It is one of the earliest of the west coast settlements, and is the centre of an agricultural country. The population is 1,438. There are three hotels, four manufactories, a sawmill, five schools (a boys' college, a State school, two private girls' schools, and a technical school). The public buildings are fourteen in number, and comprise among others municipal offices, opera house, public library, and reading-room, post-office, courthouse, &c. There is also a public park of some 10 acres in the centre of the borough. The town is supplied with water by gravitation from a reservoir one mile and a half away, the pressure being equal to 45 lb. to the square inch. Municipal gasworks have recently been installed. The township of Bull's, on the north side of the Rangitikei River, lies between Marton and the Coast. From Marton Junction the North Island Main Trunk Railway extends up the Rangitikei Valley, passing through the townships of Hunterville, Mangaweka, Taihape, Waiouru, and Ohakune, on to the boundary of the Province at Taumarunui. Near Mangaweka are the Makohine and Mangaweka viaducts, two imposing structures of steel, the former being 250 ft. high, and one of the most difficult items of construction on the line. A road runs from Turangaere through Moawhango to Napier, and some tourist traffic still passes over the old coach-road from Tokaanu, through Waiouru, Ohakune, and Raetihi to Pipiriki.

Hunterville, situated in the centre of a grazing district, has a population of 658. There are two hotels, two public halls, a State school, post-office, courthouse, railway-station, &c. Water-supply and drainage system are now being installed. Lighting is by acetylene-gas. There is a public domain. The rainfall during 1910 was 34.97 in., and fell on 147 days.

Taihape, situated on the North Island Main Trunk Railway, has a population of 1,577 persons. There are two hotels, a school, a post-office, courthouse, and several manufactories, and extensive improvements to the railway-station yard have recently been carried out. Water-supply by gravitation for drainage only, and rubbish is removed to a depot. There are 50 acres of recreation reserves. The rainfall during 1910 was 33.77 in., and fell on 161 days. The progress of the railway has brought the sawmilling industry into the southern part of the extensive Waimarino forest, and about a dozen mills are now at work in the neighbourhood of the old settlement of Ohakune, which is rapidly becoming an important distributing centre. Ohakune, adjacent to the Main Trunk Railway, has a post and telegraph office, school, and several boardinghouses. The Town Board has street improvements and electric lighting in contemplation. The streams in the neighbourhood are well stocked with trout.

Wanganui, situated near the mouth of the river of that name, is the oldest town after Wellington, from which it is 150 miles by rail — the distance by sea

being only 120 miles. It is the centre of an excellent farming district. The population is 10,929. The town is lit with gas, and has a gravitation water-supply, also a gravitation drainage scheme discharging into the Wanganui River. An electric tramway system, has been installed. Refuse is collected, buried, or burned. There are twelve hotels, twelve manufactories of various sorts, and two sawmills. There are two colleges—one for boys and one for girls—four State Schools, five Catholic schools, technical school, a post-office, public library, museum, land office, &c., courthouse, observatory, opera house, hospital, railway-station, and four recreation-grounds. The rainfall during 1910 was 36.67 in., and fell on 144 days. The Railway Wharf, the principal one, is some 900 ft. long, and can accommodate six coasting-vessels. An extension of 625 ft. to this wharf has now been completed. This will accommodate thirteen or fourteen coasting-vessels. The new wharf at the Heads, 400 ft. in length, is also just completed. The Cattle Wharf is 40 ft. long. Hatrick and Co.'s Wharf and the Aramoho Wharf are each 40 ft. long. The port light on North Head, Castlecliff, is one of the sixth order, and in clear weather is visible for thirteen miles. The depth of water on the bar varies from 16 ft. to 19 ft. at high water, and 8 ft. to 11 ft. at low water. There is 14 ft. of water at the wharves at high water, spring tides. Coasting-vessels can cross the bar at any state of the tide, but with a strong south-west gale blowing they are unable to cross outward. The Board has in hand a north and south mole for the improvement of the entrance to the river, and a new coal-wharf. When these are completed it is estimated that a depth of 20 ft. will be available on the bar at high water, spring tides. The flats above Land-guard Bluff, have been removed by dredging, and there is now 15 ft. to 16 ft. of water over them. Six hundred and seventy vessels, with a registered tonnage of 170,274 tons, were entered inwards, and 665 vessels, with a tonnage of 169,194 tons, were entered outwards during the year ending 31st December, 1910. The value of imports for that period amounted to £211,387, and the exports to £401,655. Near the mouth of the river are freezing-works, the meat from which is conveyed by lighters to the large English steamers which lie off the mouth of the river. Not far from it are some extensive railway workshops. The Wanganui River is navigable for a light-draught steamer up to Pipiriki, a distance of sixty miles, and a launch goes a further distance of eighty-four miles to Taumarunui.

Raetihi, with a population of 399 persons, has no hotels, being within the King-country, within which the sale of liquor is prohibited; but there are three good boardinghouses, a State school, post-office, police-office, Waimarino County Council's office, and dairy factory. There is also a recreation-ground of some 11 acres in extent. The water-supply is by pumping and wells, but there is no drainage system beyond a few open drains, &c. Refuse is carted away.

Ohakune is situated on the Main Trunk Railway about midway between Auckland and Wellington. The population of the Town District is 743. The public buildings comprise two halls, four churches, post, telegraph, and telephone offices, &c. There are also five factories, twenty sawmills within a radius of three miles, five schools within the same radius, and twelve hotels without licenses. Ohakune is the centre of a large and fertile district. At present the timber industry is the most important, but as the bush is cleared, dairying, for which the country is admirably adapted, will become the staple industry. There is a large and increasing tourist traffic, as the town is close to Mount Ruapehu and on the main road to Waiouru, whence coaches run to Lake Taupo and Pipiriki.

The Chatham Islands, about 500 miles to the east of New Zealand, form a part of the Wellington Land District. They consist of Chatham and Pitt Islands, with a total population of 476, 218 being Maoris. There is a monthly steamer service from Lyttelton during the greater part of the year. The islands contain very little agricultural land, sheep-farming being the chief occupation. Fish is very plentiful in the vicinity of the islands, and a private company has erected freezing-works at Owenga to preserve fish for use in New Zealand and Australia. A medical man acts as Government Resident and Magistrate. The Public buildings comprise a church, State school, post-office, courthouse, library, and institute, also two stores and hotels, each of which holds a license.

Land open and available for Ordinary Selection.

Crown Land Guides and sale lithographs, giving full particulars of land open for selection in this land district, will be forwarded to any one on application to the Commissioner of Crown Lands, Wellington.

Native Lands.

Townships are now surveyed at Pipiriki, Tokaanu, Parata, Potaka, and Hokio; sections in Tokaanu and Hokio are open for leasing under the Native Townships Act, 1895.

Particulars as to the lands vested in the Aotea Maori Land Board which have been prepared for lease, including the Whaharangi Block, and of any other blocks under their jurisdiction, may be obtained on application to the Secretary of that Board, Wanganui.

The blocks under lease to Europeans contain about 374,700 acres, the principal being Owhaoko, Mangohane, Ruanui, and Oroumatua. Of others passed through the Native Land Court there are about 562,415 acres which are fit for settlement, the principal being the balance of the Awarua and the Motukawa, Te Tuhi, Ahuahu, Rangiwaea, and Puketotara Blocks, in the central district; Raetihi in the Waimarino district; Tauakira, Ohotu, Whaharangi, and Morikau No. 1, on the Wanganui River; Maraetua and Kaha-kaha, between the Wanganui and Wangaehu Rivers. Those not suitable for settlement at present are the Te Hautu, Ohuanga, and Kaimanawa on the east side, and the Oahukura on the west side, of Tongariro Mountain, containing an area of about 345,000 acres.

The Native lands which have not passed the Native Land Court contain an area of about 105,306 acres, the principal being the Pukehika, Te Hautu, Wai-hunu, and Waipapa Blocks, on and between the Wangaehu and Wanganui Rivers, and some others on the west side of the latter river.

Pastoral and Agricultural Industries.

The pastoral industry is by far the more important, the total area in grass in 1911 being 3,057,644 acres, as compared with 114,517 acres under crop, garden, or orchard.

Dairy Industry.

Both soil and climate are well adapted for the production of butter and cheese. The output of cheese has greatly increased during the past three years, and there is every prospect of further increase.

Twenty-six butter and forty-five cheese factories were returned in March, 1911, as at work in the Wellington District.

Phormium Tenax.

The principal flax-mills working are at Waikanae, Koputarua, Makerua, Tokomaru, Linton, Oroua Bridge, Bull's, and Foxton, in the Manawatu. This industry has increased greatly of late years, though the output and price are now depressed, the export from Wellington for the year ending 31st March, 1911, being 13,921 tons of dressed flax, valued at £282,211. The tow produced in the course of manufacture, which was formerly destroyed, is now found to have a considerable market value. For the year ending 31st March, 1911, 2,831 tons, valued at £20,468, were exported from Wellington.

Timber Industry.

Sawmills are to be found in different parts of the district where the means to convey the timber from the forests are sufficient and not too costly, the timber cut being principally totara, red-pine (rimu), and white-pine (kahikatea); the first two are largely used in house-construction, bridge-building, and other works,

and the last for butter-boxes, and export to Australia, for similar use there. Others of the native woods are very beautiful, but are utilized only to a small extent.

The principal mills are near Eketahuna for the Forty-mile Bush and Wairarapa districts; at Otaki, Levin, and Shannon, in the Manawatu district; and at Taihape, Raetihi, Utiku, Rangataua, Ohakune, Manunui, and Taumarunui, in the interior country. There are also mills and factories in Wellington and other towns for dressing the rough material.

THE MARLBOROUGH LAND DISTRICT.

F. STEPHENSON SMITH, Commissioner of Crown Lands.

Boundaries.

The Marlborough Land District, occupying the north-east corner of the South Island, and containing about 2,768,000 acres of land, is bounded generally on the north and east by Cook Strait and the east coast as far as the Conway River; thence by that river to its junction with the Towy River; from this point, by straight lines, rivers, and the summits of watersheds, to the western side of Tennyson Inlet, Pelorus Sound. From the Conway to the Acheron River it abuts on to the Canterbury Land District, and from that river to Pelorus Sound it is bounded by the Land District of Nelson.

The widest part of the district is from Cape Campbell to Tophouse, a distance of about sixty-seven miles, and the extreme length from Cape Jackson to the Conway is 120 miles.

Physical Features.

The district throughout is generally mountainous, but none even of the highest peaks are covered with perpetual snow, although Tapuacnuku, the highest of the Inland Kaikouras, attains an altitude of 9,462 ft. Of the Seaward Kaikouras, or Looker-on Mountains, the highest points are Manukau and Whakari, which are 8,562 ft. and 8,515 ft. respectively. There are several lesser peaks, from 4,000 ft. upwards.

The view from Kahautara Bluff, south of Kaikoura Settlement, looking northwards, when the Looker-on Mountains are snow-capped, is said to be one of the finest in New Zealand.

Geologically, the district may be briefly described as follows: North of the Wairau River the rocks belong chiefly to the Upper and Lower Devonian series, with a belt of Silurian between them, embracing the country along the west of Queen Charlotte Sound to Cook Strait. Within these series auriferous deposits are found, and at present worked at Mahakipawa, Wakamarina, and Wairau Valley. In Endeavour Inlet an antimony-mine was worked for some time; but operations were discontinued and the machinery removed. The country south of the Wairau River may be said to belong chiefly to the Carboniferous Age, with patches, along the coast and up the Clarence Valley, of Cretaceo-Tertiary and Lower Greensand formations; while along and between the Awatere and Clarence Rivers volcanic formation and numerous intrusive dykes occur. The Red Hills also, at the head of the Wairau Valley, are of volcanic origin.

Coal has been discovered in the neighbourhood of Picton, and in the Clarence Valley, but none has been as yet successfully worked within the district. A narrow belt of Tertiary limestone, suitable for building purposes, extends, with small interruptions, from Cape Campbell to the boundary of the Canterbury Provincial District. The Marlborough land may be divided into three classes: Open land, generally covered with associated grasses; forest land; and intermediate, or land partly forest, partly covered with scrub, fern, or other rank vegetation. This original condition of the soil naturally gave rise to a localization of industries, and a very unequal distribution of settlement. Thus the open country was taken up for pastoral purposes; in the forest country the timber industry was developed, and the intermediate land passed into the hands of

farmers. Though agriculture is now extending into the pastoral and forest country, and considerable areas of forest land have been cleared and laid down in grass, the portions of the district characterized by these respective industries are still well defined.

In the northern part of the district, bounded by Cook Strait, numerous deep fiords and bays run far into the land. The principal of these are Pelorus and Queen Charlotte Sounds, Tory Channel, Port Underwood, and Port Gore.

These sounds are very picturesque, but the hills surrounding them are not so rugged and precipitous as are those of the thirteen celebrated Sounds on the west coast of Otago and Southland.

Though generally steep, the land is not too rough to be used for pastoral purposes, and nearly all the land in the Sounds is occupied by thriving settlers.

Pelorus Sound, the most extensive and picturesque, is thirty-four miles long, following the course of the main channel, with the Town of Havelock at its head. There are many bays and inlets branching off in all directions: the largest of these is Kenepuru Sound, fourteen miles long. Pelorus Sound, including its branches, has a shore-line of over 300 miles in length, not counting islands.

Queen Charlotte Sound is the next in length, being thirty miles from its entrance to its head; it also has many bays and inlets, one of which is Picton Harbour, twenty-five miles from the entrance.

Tory Channel is ten miles long, and forms the most direct line of communication between Picton and Wellington. The distance from Wellington Wharf to the entrance of Tory Channel is about forty miles, and about twenty more to Picton.

The shore-line of Queen Charlotte Sound and Tory Channel is over 200 miles in length. The entrance of Queen Charlotte Sound is about twenty miles distant from that of Pelorus Sound, and this latter is about twelve miles from the French Pass. Generally there is deep water in all the sounds and bays, and good anchorage can be found near the shore. The country is hilly everywhere in the neighbourhood of the Sounds, the highest point being Mount Stokes, 3,951 ft. above sea-level.

Rivers.

Four considerable rivers, the Wairau, Awatere, Clarence, and Conway, rise towards the western boundary of the district; the two former, running east and north, fall into Cook Strait; the two latter, taking a southerly and easterly course, discharge into the sea on the eastern side of the Island. These rivers water large and fertile valleys, but none can be entered by vessels except the Wairau, which is navigable for small steamers for about twelve miles from its mouth.

Plains.

The Wairau Plain, containing about 65,000 acres, on which stands Blenheim, the Capital of Marlborough, is the principal block of agricultural land within the district. The soil, generally good, is, on the lower or seaward side of the plain, extremely fertile, especially in the neighbourhood of Tuamarina, Spring Creek, and near Blenheim, which is surrounded by numerous gardens, with rich deep mould, and well sheltered by trees. The average yield of wheat for the plain is about 30 bushels per acre; of oats and barley, 35; of peas, 30; and of potatoes, 10 tons per acre. Hops have been successfully grown for many years in the neighbourhood of the town, but, owing to the high price of labour, their cultivation has not extended. The plain, traversed in all directions by good macadamized roads and dotted over with numerous comfortable homesteads, standing in clumps of trees amidst well-cultivated fields, has already an old-world appearance. More than half the population of the Marlborough Land District—15,985, according to the last census—is centred in the town of Blenheim and on the Wairau Plain. Besides this plain there are several thousand acres of terrace flats and valleys along the larger rivers, notably at Starborough, on the Lower Awatere.

Lakes.

There are not any lakes worthy the name. The largest is Kapara te Hau, more familiarly known as Grassmere, situate on the coast between the Awatere River and Cape Campbell. It is about three miles in diameter, and very shallow, being, indeed, no more than a lagoon, as during a dry season there is little or no water in it.

There are two other lakes of small size, viz.—Lake Elterwater, four miles south of Lake Grassmere, and Lake McRae, situate in the open country between the Awatere and the Clarence Rivers.

Forests.

The portion of Marlborough north-west of the Wairau River, extending to the boundary of the Nelson Land District, and including the county of Sounds, in all about 280,000 acres, was originally covered with dense forest. In the valleys and on the lower hill-slopes, rimu, kahikatea, matai, totara, miro, and tawa were the principal forest-trees. The higher portion of the hills and steep spurs are clothed with the various species and variety of birch (beech), to which along the shores of the Sounds were added pukatea and kohekohe, the latter locally called cedar.

Since 1860 sawmills have been at work in various parts of the district. Thirty-five mills have been erected, and have worked for longer or shorter periods. Havelock, on the Pelorus Sound, is at present the headquarters of the timber trade.

The hills along the shores of the Sound will, for many years, furnish birch sleepers. There are other timbers left in places, but nowhere sufficient to justify the erection of a mill, unless pukatea wood, hitherto neglected, could be utilized. It is a light, tough timber, well adapted for boat-building and for packing-cases. The quantity of pine timber remaining in the Kaituna and Onamalutu Valleys is small, but there is a good supply of birch and other wood, suitable for fencing and firewood. On these valleys the Wairau Plain is mainly dependent for timber.

The Pelorus Valley, with its tributaries the Wakamarina, Rai, Ronga, and Opouri Valleys, still contain about 150,000,000 ft. of convertible timbers, exclusive of the birch, of which there is a large amount of the best quality on the hills and terraces. The Wairau, Blenheim, and other districts extending southwards must depend for the future on this source for all their building material.

In the neighbourhood of Kaikoura, along the base of Mount Fyffe, and in the Hapuku Valley, there is another small block of forest land in which three small sawmills have been erected. The quantity of timber suitable for sawmill purposes in this block is very limited, but it will furnish the neighbouring country with firewood and fencing for many years.

Soils and their uses.

The Wairau Plain, which is the principal block of agricultural land, has been already dealt with. The second agricultural centre is in the neighbourhood of Kaikoura. The land extending along the base of Mount Fyffe, between the Kohai and Hapuku Rivers, about 13,000 acres in extent, is held in small or moderate-sized farms; the soil is good, the block known as "The Swamp," between Mount Fyffe and the Peninsula, being particularly rich. In the Pelorus, Kaituna, and Onamalutu Valleys, and in the Sounds, settlers following in the wake of the sawmills have already converted much of the land worked over into grazing-farms. The land is of three descriptions—alluvial flats, terraces, and hill-sides. On the flats in the larger valleys the soil is rich, producing heavy crops of oats, peas, beans, and potatoes, wherever it has been brought into cultivation. The terrace-land varies much in quality, but generally grows good grass, as do also the hills on which tawa formerly grew; the birch country being very barren. On the small bush-farms cattle-grazing is the chief pursuit.

Grazing.

About 1,680,000 acres of the Marlborough Land District are at present devoted to keeping sheep. The leaseholds in the northern parts of the district contain a large extent of scrub and fern covered country, now producing little or no food for sheep, but capable of improvement. The total number of sheep depastured is 1,072,946, distributed as follows amongst the counties into which the land district is divided: Marlborough County, 686,532; Sounds County, 172,037; Kaikoura County, 214,377. On the natural pasture of the open country merino sheep are kept almost exclusively, the land carrying from half to one sheep per acre. In the forest country, on sown grass, the land keeps from one to three crossbred sheep per acre. Along the shores of the Sounds large areas of hill-land have been taken up on lease, and are now being cleared and laid down in grass expressly for keeping sheep, but generally throughout the forest country the holdings are small or of moderate size; hence this is, after the Wairau Plain, the most populous portion of the district.

The export of wool during last year shipped *via* Picton was 13,000 bales by direct boat. A large proportion of the wool from this district is shipped from Wellington and Lyttelton.

Industries.

Gold-mining has been carried on for some years, principally at Mahakipawa, Wakamarina, and Wairau Valley. At present not much gold is being obtained.

Ten sawmills are at work within the district—one at Kaikoura, and the others in the Pelorus, Kaituna, Onamalutu, and Wakamarina Valleys, and in the Pelorus and Queen Charlotte Sounds—the total output being about 11,971,000 ft., employing about two hundred and fifty hands. The principal ones are Messrs. Brownlee and Co.'s, in the Pelorus and Rai Valleys, their tramway being some twenty-two miles long, the output last year being about 6,623,000 ft. Messrs. Brownlee and Co. have 130 men employed, and keep two vessels running between Havelock and Lyttelton.

During the year very little work was done in the phormium industry, and the output of fibre was 3,447 bales and 1,640 bales tow by direct boat.

There are three flour-mills at work, two of them being owned by Messrs. Redwood Bros. The one at Spring Creek is a complete roller-mill, driven by water-power, and can turn out about 14 tons of flour in twenty-four hours. It is electric lighted, and the sack-working machinery is driven by electric motor. The other two mills are in Blenheim; one is worked by gas and the other by steam.

There is a butter-factory at Spring Creek which contains all the latest improvements in machinery, and cheese-factories at Kaikoura, Hapuku, Havelock, Tuamarina, Flat Creek, Canvastown, and the Grove. The total output for district being 571 tons.

Climate.

Marlborough possesses an excellent climate, and at Blenheim it is fine weather nearly all the year round.

The original distribution of the open and forest lands was entirely due to climatic causes. At Cape Campbell, one of the barest places in the district, the annual rainfall is only about 24 in. or 25 in.; in the Pelorus Valley, the centre of the forest country, it is over 65 in. This difference between the climates of the north-western and south-eastern portions of the district explains why the artificial pasture-land, when compared with the natural pasture, supports such a large amount of stock. Winter and spring are the wettest seasons, hence the dry climate is not unfavourable for agriculture. Wherever the soil is suitable, crops sown in winter and harvested in early summer can be successfully grown. Everywhere near the coast the range of temperature, considering the latitude, is very small. The thermometer seldom falls below 30 deg., or rises above 78 deg. Along the shores of the sounds the mildness of the winter, owing to the curious distribution of land and water, allows lemons, oranges, passion-fruit, figs, and other

sub-tropical fruits to be grown in favourable situations. On the lower hills and terraces of the forest country the chestnut (*Castanea vulgaris*) grows rapidly, and commences to bear fruit in five or six years. In all parts of the low country the common English fruit-trees—apple, plum, pear, cherry, &c.—yield abundantly, the fruit, owing to the clearness of the atmosphere, being of excellent quality. In the high country, where snow falls, occasionally during winter, red, white, and black currants can be produced in such quantities that with little labour they might be made an article of export to the warmer parts of Australia.

Towns.

The chief town, Blenheim, is situate on the Wairau Plain, at the junction of the Opawa and Omaka Rivers—a third river, the Taylor, would join at about the same point were it not that when not in flood it disappears beneath the surface, about three miles south of the town. Blenheim has been termed a miniature Christchurch, doubtless from its extreme flatness. Considering this, its streets are not so straight and wide as they should be. The Government Buildings, which comprise the Post and Telegraph Offices, Lands and Survey Offices, Courts of Justice, &c., form a handsome edifice in the centre of the town, which is well planted with deciduous and evergreen trees. It is about eighteen miles and a half from Picton by rail, and about twelve miles from the sea by the Opawa River, which is navigable for small steamers. Blenheim is lit with gas, and is supplied with water principally by artesian wells. The population is 3,771.

The next town in importance is Picton, the principal port, only fifty-three miles by sea from Wellington. This little town, both in position and appearance, may be said to be the antithesis of Blenheim, being most picturesquely situated at the head of Queen Charlotte Sound, and nestling among hills, some of the higher ones still densely covered with birch and other forest. There is frequent communication with Wellington and Nelson by steamers averaging over 1,000 tons, and vessels of large size can lie at the wharf at low water. The direct exportation of frozen meat from Picton commenced in 1892, when 16,433, carcasses were shipped. The Christchurch Meat Company exported from Picton for the year ended 31st March, 1911, mutton, 27,582 carcasses, and lambs, 101,960 carcasses. Picton possesses a malting establishment also, producing for export, as the excellent quality of the barley grown on the Wairau Plain insures a ready market. A small quantity of oysters, mostly procured in Queen Charlotte Sound, is annually exported from Picton; with culture the supply might be almost indefinitely increased, many of the sheltered bays in both sounds being well adapted for the purpose. What is now being done along the Marlborough coast is a mere trifle compared with what might be accomplished if capital and knowledge were brought to bear on the fishing industry. Around the whole coast, from the mouth of the Conway to near the French Pass, the sea abounds in fish. Within the sounds and amongst the islands of Cook Strait, hapuku, snapper, moki, barracouta, raturi, kahawai, and rock-cod are extremely plentiful. Immense shoals of the southern herring (*Clupea sagax*) and of anchovies (*Engraulis encrasicolus*) frequent the inlets at certain seasons of the year, and quantities of fresh fish are exported thence to various places within the Dominion. As steamers arrive at and leave Picton almost daily, shipments can be made without delay to all parts. Picton is lighted by a good service of acetylene-gas, and possesses a good gravitation water-supply. Its population is 1,361 persons.

Havelock, situate at the head of Pelorus Sound, is, as has been already stated, the present headquarters of the timber trade, Messrs. Brownlee and Co.'s steam sawmill, at the mouth of the Pelorus River, being only a mile or so from the town. Between Picton and Havelock there is a mail-service twice a week, via Cullensville, on the Mahakipawa Goldfields. The population of Havelock is 301 persons.

The town of Kaikoura, the greater part of which is built on a raised shingle-beach, is situate at Kaikoura Peninsula, near the southern boundary of the district. The town, with the adjoining settlement of small farms, forms one of the most picturesque spots in New Zealand, lying as it does under the Seaward Kaikouras.

or Looker-on Mountains. At the back of the town the peninsula, which is composed of Cretaceo-Tertiary limestone, rises abruptly for about 100 ft., and affords splendid sites for dwellinghouses. Kaikoura is connected with Flaxbourne by a tri-weekly coach service, the distance being about fifty miles. There is also direct steamer-communication with Wellington and Lyttelton. The population of the town is 408.

Roads and Railways.

The only railway is that running in a southerly direction from Picton *via* Blenheim to Ward station, forty-eight miles in length, and destined ultimately to connect with the existing Canterbury system. Three trains run daily between Picton and Blenheim, about eighteen miles, and trains twice daily on three days in the week and once daily on the other three days between Blenheim and Ward. A substantial railway and traffic bridge over the Awatere River, costing £22,500, is a great boon to the district.

The main road to Nelson, distant seventy-eight miles, is a good metalled road nearly the whole way. It runs up the Wairau Valley from Blenheim for about six miles, crosses the Wairau River into the Kaituna Valley, which it follows as far as Havelock—about twenty-eight miles. It then runs up the Pelorus and Rai Valleys, and ascends by easy gradients to the Brown Saddle, where it crosses the boundary into Nelson. An excellent coach service—probably the best in the Dominion—has been established for some years, the coach running to and from Nelson on alternate days, covering the distance in eleven hours, and another coach service three times a week has been established between Blenheim and Havelock.

The Main South Road, running over the Taylor Pass into the Awatere Valley, and through the Starborough, Flaxbourne, Kekerangu, and other properties, connects Blenheim with Kaikoura and the south, and is a good road during dry weather, although it might be much improved in places. Since the acquisition of the Starborough Estate by the Government the bulk of the traffic now goes *via* the Redwood Pass, as it is a more direct route to the town of Seddon. The portion between the Clarence River—over which a fine bridge was built some years ago—and the Hapuku River runs along the coast under steep hills covered with forest. A road to the south of Kaikoura, between the Kahautara and Conway Rivers, is now completed, and forms part of the main Cheviot-Kaikoura Road, and, besides its great usefulness in opening up the country through which it passes, will also become a favourite route for tourists, as in many places it passes through most picturesque scenery.

A good road has been formed up the Wairau Valley, passing through the Bankhouse, Erina, Lansdowne, Hillersden, and Birch-hill properties, and connecting with Tophouse, just outside the boundary, distant fifty-six miles from Blenheim. At Tophouse there is an hotel and a telegraph-station, and thence a good road leads to Belgrove, on the Nelson Railway-line.

A coach runs twice a week between Blenheim and Wairau Valley—twenty-five miles—where there is an hotel, a post and telegraph office, and one or two stores.

There is also a good cart-road running up the Awatere River—which it crosses and recrosses several times—as far as Molesworth Station, about seventy miles from Blenheim. Between these points there is a weekly coach and mail service.

There are other minor roads and bridle-tracks throughout the district too numerous to specify.

Crown Lands.

The area of Crown lands at present available for settlement is about 300,000 acres, but of this area 114,000 acres are barren and worthless, being chiefly the summits of high, rugged country. The balance of available area lies principally in the Pelorus, Rai, Wakamarina, and Clarence Valleys, and in the Sounds, and will doubtless be readily taken up when thrown open for selection.

THE NELSON LAND DISTRICT.

R. T. SADD, Commissioner of Crown Lands.

Boundaries of Land District.

The Nelson Land District, comprising an area of 4,686,000 acres, is situated at the north-western corner of the South Island, extending from latitude $40^{\circ} 30'$ south to about latitude $42^{\circ} 30'$ south. It is bounded towards the west and north by the sea from Perpendicular Point, on the west coast to Pelorus Sound (a distance of about 520 miles); towards the south-east by the range leading over Elliot Peak and the Rai Saddle to the Pelorus River, thence by that river to its source in Slaty Peak, and by the western watershed of the Wairau River, the Raglan Range, and the Spenser Mountains to the southern watershed of the Maruia River; towards the south by the Grey River and the Otututu River to Mount Faraday, and thence by the Paparoa Ranges to Mount Pecksniff (4,250 ft.), and by the Pororari River to the sea.

Introductory.

Glancing for a moment at the topographical map of the Nelson District, the impression left on one is that the country consists entirely of masses of rugged mountains, rocky peaks, and narrow gorges through which rivers and torrents flow. Such an impression would, however, be a false one so far as the real character of the country is concerned, for, although mountain-ranges predominate, there are nevertheless scores of excellent plains and valleys between the ranges and along the rivers throughout the district, which are being gradually brought into cultivation chiefly for pastoral purposes. The backblocks of Nelson, comparatively remote from the city, have until recently been a *terra incognita*. Naturally enough in the earlier stages of settlement in such territory only the easily accessible lands are sought after. However, as population increases the country becomes better explored and will gradually come into prominence, when many mistaken ideas respecting it will be dispelled.

Physical Features.

Undoubtedly the most distinctive feature of Nelson is the mountain-system. The mountains are well defined. First in importance is the eastern mountain-chain, which commences near Queen Charlotte Sound and runs south-westerly more or less continuously until it is broken through by the pass which leads to the Valley of the Wairau, a few miles to the north of Lake Rotoiti, where it recommences and is known as the St. Arnaud Range and further on as the Spenser Mountains, in the peaks of which an altitude of nearly 8,000 ft. is attained, thus traversing the whole length of the land district and forming the main watershed between the east and west coasts. From this eastern chain flow some of the principal feeders of the Buller River. Next in importance to the eastern chain is what may be called the western mountain-chain, which rises at Separation Point, in Golden Bay, and runs south-west generally parallel to the eastern chain for the entire length of the district at elevations reaching 3,750 ft., 4,355 ft., and 5,800 ft., and known at its approach to the Buller River as the Lyell Range, and south of the Buller River as the Brunner Range and the Victoria Range respectively. This chain is broken by the Buller River. On the western side of this western chain are the sources of the Karamea River, the Mokihinui River, and of the many tributaries of the Inangahua River. Branching off from the eastern mountain-chain before described, at Mount St. Arnaud (5,621 ft.) is a lateral mountain-chain running north-west to Mount Owen (6,165 ft.), and thence to the head-waters of the Wangapeka River, where it meets the western chain. The subsidiary chain forms the watershed of the Wangapeka and Motueka Rivers, which flow northerly towards Tasman Bay, and also the watershed of the Matiri, Owen, and Hope Rivers, which are tributaries of the Buller River. From Mount Arthur (6,500 ft.), on the western mountain-chain, a lateral mountain-range runs north-west to the west coast, the prin-

cipal peaks of the last-mentioned range being Mount Peel (5,370 ft.), Mount Cobb (5,560 ft.), and Mount Domett (5,800 ft.). In this range is the source of the Aorere River and of the Takaka River, both of which discharge their waters into Golden Bay. In addition to the mountain-chains mentioned, there are several subsidiary chains running parallel to the eastern and western chains and to the lateral chains, besides isolated mountain-masses, rocky peaks, and hills connecting with the principal mountain-system by means of low ranges and passes.

Rivers.

The Buller River is not only the most important river in the Nelson District, but, relatively speaking, in New Zealand. It runs its varied course for over a hundred miles from Lake Rotoiti—which is practically its source—flowing generally in a westerly direction through gorges, valleys, rocky defiles, and alluvial deposits right across the land district to where it flows into the sea at the Town of Westport. The Buller River constitutes an extensive watershed of about 4,500 square miles. Its principal tributaries are rivers which carry large volumes of water. Taking them in their order, from the source towards the mouth of the Buller River, there are the Howard, Gowan, Owen, Mangles, Matakītaki, Matiri, Maruia, and Inangahua. The fall of the Buller River, from its source to the Mangles—a distance of thirty-three miles—is 1,468 ft., or 44 ft. to the mile. Nearly all the tributaries of the Buller River named are goldfields independent of each other.

The Inangahua River, although, strictly speaking, a tributary of the Buller, yet fairly comes within the category of a river. It has its source in the Victoria Range, from whence flow many tributary streams: it is also fed by streams having their source in the Brunner Range.

Other rivers worthy of mention are the Karamea, which rises in the westerly mountain-chain near Mount Arthur, and the Motueka and Takaka Rivers, which flow into Tasman and Golden Bays respectively. It may be remarked that none of the rivers in the Nelson District are deep enough for navigation. Another feature worthy of notice is that all the large rivers discharge their waters on the west coast.

Lakes.

The lakes in the Nelson District are alpine in character, and comparatively small. They are, however, exceedingly beautiful, their environment—picturesquely wooded ranges and snow-capped mountains and valleys—being unsurpassed.

The principal lakes are Rotoroa, situated about seventy miles from Nelson, and Rotoiti, situated about fifty-seven miles from Nelson. Access to the former is by the main coach-road, Nelson to Murchison, and a bridle-track up the Gowan Valley; to Rotoiti, *via* the Tophouse, by good dray-road. There is also the Matiri Lake, situated west of Mount Owen, the Diamond Lakes, situated in Cobb Valley, near the source of the Takaka River, and Lake Daniels, situated near the head-waters of the Maruia River.

Plains and Valleys.

The Waimea Plain, extending from Nelson City to the Village of Wakefield, seventeen miles, and containing about 28,000 acres, is the oldest-settled locality in Nelson—probably in New Zealand. This plain is occupied in small holdings by farmers and orchardists, and until recently it was supposed to be the only land in Nelson suitable for agricultural farming. The result, however, of explorations through south-west Nelson has proved that there are many plains of moderate area, and also valleys, throughout the district which possess a fertile soil, and these are being brought into use for pastoral purposes. Amongst the plains worthy of note are the Maruia Plains, containing 33,000 acres, and now in the process of being settled, the Matakītaki, Tiraumea, Tutaki, Central Buller, Inangahua, Karamea, Heaphy, Oparara, Matiri, Wangapeka, Tadmor, Sherry, Ikamataua, Mawhera-iti, and numerous rich flats, besides an extensive area of open *pakihi* land.

Forest.

Nelson is almost entirely a forest country. Out of 3,000,000 acres of Crown land, about 2,500,000 acres are still under forest and scrub. The forest contains a large variety of timber. There are rimu (red-pine), kahikatea (white-pine), totara, matai (black-pine), black-birch, brown-birch, red-birch, silver-birch, kohekohe (New Zealand cedar), titoki (New Zealand ash), mapou (red matipo), yellow-pine, tawa, kawakawa (tall pepper-tree), rewarea (New Zealand honeysuckle), horopito (pepper-tree), makomako (wineberry), manuka (tea-tree), horoeka (lancewood), puka (broadleaf), kowhai, and kamahi; and undergrowth of tutu, koromiko (veronica), fuchsia, and hoho (five-fingers). Birch predominates. Rimu is becoming scarce and valuable. It is estimated that the amount of timber fit for milling does not exceed 4,573,000 superficial feet.

Classification of Crown Lands.

The Nelson Land District contains about 4,686,000 acres. Up to the 31st March, 1911, there had been sold, leased, or otherwise disposed of an area of 1,696,745 acres, leaving an area of 2,989,255 acres, which may be classified as follows: Lands suitable for mixed farming, 150,000 acres; lands suitable for pastoral purposes, 1,235,255 acres; lands suitable for reservation for forest, climatic, and scenic purposes, 884,000 acres; and barren mountain-top, and roads, lakes, rivers, &c., 720,000 acres.

The area suitable for mixed farming may be described generally as light to heavily timbered country, with tracts of open terrace lands (*pakihi*), the latter being stony and mossy in places. The timber consists of black-birch, brown-birch, red-birch, red-pine, white-pine, mountain totara, and kowhai, with undergrowth of broadleaf, fuchsia, pepperwood, wineberry, lancewood, lacebark, and black scrub. The soil on the river-flats is exceedingly rich, and on the slopes and up to a good elevation there is a great deal of limestone, marls, sandstone, and conglomerate. That the open terrace land before referred to may be improved by drainage and cultivation is evidenced by the results obtained in the Inangahua County, but considerable capital and patience are required to make it reproductive. The area suitable for pastoral purposes naturally comprises the hilly country, which is wooded similarly to the flat and low-lying country just described, but the birch forest predominates and the undergrowth is not so dense. The formation is limestone, serpentine, granite, and conglomerate. Where the forest has been cleared and grassed, at a cost of about £3 per acre, the results from this country have been excellent. It carries about two sheep to 3 acres.

The area suitable for reservation for forest, climatic, and scenic purposes is an estate of great value, for, although it possesses no value as land suitable for any kind of settlement, yet it is a picturesque show-ground for tourists.

The barren mountain-tops, although reaching to a high elevation, have a value for grazing purposes in many localities during a portion of the summer season; in fact, there is a considerable area for that purpose held under lease at the present time.

It is not too much to say that included in the lands thus briefly described there is land suitable to every kind of culture—stock-producing, dairying, fruit-growing, pig-breeding, &c. The general average quality of the lands, combined with a mild climate, justifies the opinion that there is a favourable field in Nelson Land District for the industrious settler. He can acquire cheap land on liberal terms, with exemption from rent for periods from two to four years, in localities where there are the requisite natural conditions for his special pursuits. These facts have been long overlooked by residents of other districts of New Zealand, and cannot now be made too widely known.

Crown Lands for Selection.

A total area of about 196,240 acres is open for selection, and, in addition, an area of 1,189,015 acres still remains for future disposal.

Industries.

Agricultural.—Agricultural farming is carried on only to a very limited extent in Nelson. It is practically confined to the Waimea Plain and the Motueka, Riwaka, and Takaka Districts. Barley, wheat, oats, maize, and rye are successfully grown in these localities. Hop-culture has been developed to a very considerable extent, and fruit-growing receives great attention.

Pastoral.—Up to a very recent period the pastoral industry was wholly confined to the old-established settlements of Nelson in the districts of Tasman and Golden Bays respectively. It is, however, now extending over the Hope, Central Buller, and Karamea districts on the west coast. Owing to the liberal land laws a large area of timber country has been taken up recently in the localities mentioned, and has been cleared, grassed, and stocked with sheep—which are more profitable than cattle on small holdings—with very promising results. The country in south-west Nelson is exceedingly healthy sheep-country; the land takes the grass well, a considerable area of it being limestone land. The climate is mild, and the access roads are in good order. A ready market for stock is found on the west coast as far south as Grey-mouth. Up to the present the supply of live-stock has not been equal to the demand. Good prices are being given for cattle and sheep. The number of sheep in the Nelson District, according to the latest returns, was 393,637; number of cattle, 38,219; and number of horses, 9,870.

Mining.—Gold was first discovered in Nelson in 1857, the oldest goldfield being Collingwood, and in this district may be found gold, silver, copper, chrome, antimony, hæmatite, and manganese. There are enormous iron-ore deposits at Parapara, near Collingwood. A mineral lease containing the iron-ore deposits at Parapara has been granted to a syndicate, but operations have not yet been commenced.

Hydraulic and alluvial mining is carried on over a considerable area in south-west Nelson. The working of alluvial flats by dredging has not, however, proved a success. It is gratifying to know this, for large areas of rich alluvial river-flats—a source of wealth for all time as cultivable lands—would have been sluiced away.

Quartz: The principal quartz-reefs of Nelson District are at Reef-ton and its vicinity, and they still maintain their gold-producing reputation. Reefing is carried on at Lyell, Boatman's, and many localities near Reef-ton. The discovery of promising reefs at Upper Blackwater has had the effect of stimulating mining operations generally in southern Nelson. It may be stated that Nelson and Westland Districts have been large and constant contributors to the gold-export of New Zealand.

Coal-mining: The most important coalfields in New Zealand are situated in south Nelson, not many miles from the Town of Westport. A very marked increase in the output of coal took place during last year, and the industry is still developing rapidly. A total of 831,200 tons of coal were produced from Westport mines during last year. The Westport-Stockton Coal Company produce a considerable quantity from their property near Millerton, adjoining the Westport Coal Company's property. There are also coal-mines at Puponga, near Cape Farewell, and at Pakawau, near Collingwood. The number of men employed in the coal industry in Nelson is about 1,500.

Timber Industry.—In the northern part of the district there are forty-eight mills in the Waimea, Takaka, Collingwood, and Murchison Counties, of which forty-three are cutting on private land, three on Crown land, and two on Native lands; the yearly output was 6,923,000 superficial feet. Matai and totara are practically cut out in this part of the district, so that the cutting is chiefly rimu and birch. There are fairly large areas of the latter, and it is being used a good deal for building purposes, and found satisfactory. In the Buller and Inangahua Counties there are twenty-seven mills, employing 250 men; and the yearly output was 8,802,000 superficial feet, an increase of over 1,000,000 ft. on last year. The total output for the seventy-five mills was 15,725,000 superficial feet. There was a decided improvement in this industry for the past year, and the prospects for the future are good.

Dairy Industry.—This industry has increased to a very large extent during the last season, not so much by an increased number of factories as by a much larger number of suppliers; notably the Murchison Factory has increased from twenty-six suppliers, milking 540 cows, to thirty-four and 960 respectively, and the Takaka Co-operative Factory is erecting a much larger and more up-to-date plant to meet the requirements of the increased number of suppliers. There are now six butter-factories and one cheese-factory in the Waimea, Takaka, and Collingwood Counties, one butter-factory in the Karamea District (Buller County), and one at Cronadun, within eight miles of Reefton, in the Inangahua County. These factories are supplied by 5,240 cows, with an output of butter and cheese amounting to a value of £56,000.

Fruit Industry.—At present this industry is confined almost entirely to the northern part of the district within a radius of twenty-five miles of the City of Nelson. Rapid strides have been made during the past year, and there has been quite a boom for apple-growing lands. Large areas have been cut up on the slopes facing Tasman Bay, and are being taken up readily. The area planted in orchards during the year was 1,100 acres, chiefly apples, and orders have been given for trees to plant nearly double the above area this coming season. This has been done in the face of the partial failure of the shipment of apples placed on the London market, which is accounted for by the fruit being too ripe when picked, and bad packing and grading. A further shipment of 5,500 cases, packed and graded under the supervision of an expert from Tasmania, has been sent to the Home market, and if it arrives in good condition is likely to realize handsome prices, according to recent quotations. As the Nelson climate is at least a month earlier than Tasmania, there appears to be a bright future for apple-culture, as the Tasmanian trade is known to be a great success. Large quantities of all classes of fruit were produced last season, and the prices were satisfactory. There are four canning and preserving factories at Motueka and Riwaka orchards, and one in Nelson, receiving its supplies from the Waimea district, but the bulk of the fruit is shipped to Wellington.

Other industries established in Nelson are freezing; ham and bacon curing; cheese-factories; grain-mills; biscuit-factory; fruit-preserving; confectionery; breweries; wine-making; aerated-water factory; coffee and spice works; sauce, pickle, and vinegar factory; soap and candle works; lime and cement works; tinware factory; iron and brass foundries; engineering-works; printing and bookbinding works; coachbuilding-works; cycle-factories; saddlery and harness factories; tanning and wool-scouring; furniture-works; hematite-paint works; tailoring, dressmaking, and millinery establishments; boot and shoe factories; and eleven flax-mills.

Roads and Railways.

There are 124 miles of railway in Nelson District. The principal line runs from Nelson City to Manu, a distance of fifty-one miles. This railway is portion of the railway scheme which will eventually connect Nelson City with the West Coast and Canterbury. Another ten miles is in course of construction into the Hope Valley, a tributary of the Buller. This extension will save the expensive haulage by wagon over the watershed, and bring the settlers in the Central Buller within easy reach of Nelson. The railway is in course of construction from Westport to Reefton, nine miles being completed at the Westport end and eight at the Reefton end. A railway runs from Westport to Mokihinui—thirty-two miles—and is an essential accessory to the development of the immense coal-deposits in the Westport district. The Westport Harbour Board own a railway which connects Westport with Cape Foulwind—a distance of seven miles. The main and district roads throughout Nelson are well maintained right through the year. The climate on the one hand, and the abundance of metal on the other, contribute towards cheapness of construction and maintenance of the roads. There are good metalled roads to the backblocks: bridle-tracks are constructed in the first

instance through the newly settled country, and afterwards widened into dry-roads in many places.

The main coach-roads are—Nelson to Inangahua Junction, 116 miles; Inangahua Junction to Westport, twenty-seven miles; Inangahua Junction to Reefton, twenty-one miles; Nelson to Blenheim, seventy-eight miles; Nelson to Motueka, thirty-two miles; Motueka to Takaka, thirty-eight miles; Takaka to Collingwood, eighteen miles.

In addition to the roads named, there are several which are safe driving-highways—amongst these being that from Foxhill to Tophouse, twenty-eight miles; Tophouse to Lake Rotoiti, five miles; Nelson to Cable Bay, fifteen miles.

Harbours.

Nelson has a good inner harbour, enclosed by a natural boulder-bank running from its entrance to the base of Mackay's Bluff, a distance of about eight miles. Certain harbour-improvements which have now been effected—the cutting of a new entrance through the boulder-bank—give a depth of 15 ft. at L.W.O.S.T., and 27 ft. at high water. The New Zealand Shipping Company's ocean cargo-steamers and the Union Steamship Company's coastal steamers trade from Nelson; the latter fleet trades also from Greymouth and Westport to Onehunga, Picton, and Wellington. A local fleet of steamers ply between Motueka, Collingwood, Waitapu, and Puponga. There are small harbours in Tasman Bay and Blind Bay, and on the west coast at Karamea River, Heaphy River, and Little Wanganui River, easily worked by steamers of light draught. There is a regular steamer service between Westport and Karamea.

Towns.

Nelson.—The City of Nelson is beautifully situated at the head of Blind Bay. Its chief attractions are its remarkably fine climate and surroundings. It is largely used as a health-resort. It has an excellent water-supply, gas-works, and abattoirs, the property of the municipality. The streets are clean and well kept, and are lighted with gas. There are three recreation-grounds, public gardens, and public swimming-baths. Nelson possesses special attractions as a residential city, and has a Boys' College, a Girls' College, School of Music, and a Technical School. The harbour of Nelson is under the control of a Harbour Board, and extensive works are now in progress, and a new entrance has been cut through the Boulder Bank, which admits of ocean-going steamers coming up to the wharf with safety. There is regular communication by steamer between Nelson and the City of Wellington, the direct trip from port to port being done in seven hours. Local steamers ply between Nelson and the many small harbours in Tasman and Golden Bays. The population of Nelson City is 8,051.

Westport is situated at the mouth of the Buller River, and possesses the finest harbour on the west coast of the South Island. It is the second largest town in Nelson Land District—population 4,729. The chief export is coal, obtained from the Westport Coal Company's and Stockton mines at Denniston and Millerton, and the State Coal-mine at Seddonville, all of which places are connected with the port by railway. The municipality owns the abattoirs, gas and water works, and an up-to-date public reading-room and library. In the centre of the town is Victoria Square; on the beach is a reserve of 12 acres, which will probably be enlarged to 50 acres. In the southern part of the town is a domain containing about 14 acres; and on the railway-line, about a mile and a half from the town, is another recreation-ground of 90 acres. Considerable improvements have been made in the Harbour of Westport by the Harbour Board. The water on the bar is 21 ft. 9 in. and in the river 24 ft. 6 in.

Reefton.—The next town of importance is Reefton—a distance of 136 miles from Nelson by railway and coach—with a population of 1,544. Reefton may also be reached from Westport by coach *via* Inangahua Junction, twenty-seven miles; and then by coach for the remainder of the distance, twenty-one miles. Reefton was the first town in New Zealand to be lit by electricity. It

is almost essentially a goldfields township, but there are large areas of alluvial land lying between Reefton and Inangahua Junction which will gradually be brought under cultivation and form the nucleus of an agricultural population.

Motueka.—The Borough of Motueka—population 1,229—is situated near the head of Blind Bay, on a beautiful plain, with considerable back country. As a fruit-producing district Motueka is rapidly coming to the front. It enjoys a genial climate, somewhat similar to the City of Nelson. There is daily communication by steamer and coach with Nelson, and a weekly direct steamer service to the City of Wellington.

Richmond.—The Borough of Richmond—population, 703—is situated in a highly cultivated part of the Waimea plain famed for its fruit and flowers. It possesses an excellent climate.

Murchison.—Until very recently Murchison could hardly be described as a hamlet. Now, however, it has risen to the status of a small township, with a population of 183 people. It has a church, school, two hotels, and nice residences. It is eighty-four miles from the City of Nelson, and is reached by railway and coach—by railway, Nelson to Kohatu (thirty-one miles); and by the mail-coach, Nelson to Westport, from Kohatu (fifty-three miles). It is situated in the centre of a district which is rapidly coming to the front as a grazing district.

Other townships and hamlets on the railway-line south-west from the City of Nelson are Stoke Village (population 721), Hope Village (population 272), Spring Grove (population 258), and Wakefield (population 671).

Climate and Rainfall.

The climate and rainfall of Nelson, generally speaking, are excellent. In the winter frosts occur between June and August. The falls of snow are comparatively light, except on the higher ranges. The average annual rainfall of Nelson for thirty years is 59 in. The average temperature for the year based on eleven years of observation is 54°86' Fahr. : the average for winter is 46°58' Fahr., the average for spring is 54°56' Fahr., the average for summer is 62°78' Fahr., and the average for autumn is 55°76' Fahr. The difference between the warmest and coldest months is 17°10' Fahr.

Sport.

Nelson, from its configuration and its good climate, offers as many attractions to the sportsman as any other district in New Zealand. Deer-stalking is to be had within a few miles from Nelson, both red and fallow deer being in very large numbers. Some Virginian deer have been recently imported. Stags in the early part of the season are usually in fine condition, full-grown beasts scaling from 300 lb. to 400 lb. Quail-shooting, owing to the destruction of the birds by stoats and weasels, is not so good as it was in former years. Quail are, however, comparatively numerous in the settled districts about Nelson and in the newly sown bush-clearings in the backblocks. Pheasants are not numerous. Trout-fishing is a favourite sport of Nelson residents. The rivers flowing into Tasman and Golden Bays have been stocked with trout, and many of the rivers on the west coast are proving admirable fishing-rivers.

THE WESTLAND LAND DISTRICT.

G. H. M. McCLEURE, Commissioner of Crown Lands.

The Westland District occupies the central portion of the western watershed of the South Island, joining Canterbury on the east; its north and south boundaries with Nelson and Otago being the Porarari, Otututu, Grey, and Awarua Rivers. The mean length is 250 miles, and its average width twenty-seven miles. The area is 3,894,887 acres, composed for the most part of the great central snow-clad mountain-chain and its outrunning ranges, intersected by narrow bush-clad valleys, and subsiding westward into undulating plateaux, river-straths, and shelving coasts.

There are few places of historical interest. The country has been sparsely peopled by the Maoris for many years past, and they have left numerous traces of their occupation. There are several beautiful allegorical legends connection with their sojourn and wanderings in various parts of the district. A coincidence holds with regard to the minerals most precious to the Maoris and Europeans—viz., that the first finds of greenstone and gold were made in the same locality—at Pounamu—and that each in its time induced adventurers to dare the unknown, and led to the exploitation of various transinsular routes, for there is not a single subalpine pass through the main range that was not known and used in the ancient days by the Maoris. They passed the information on to the whites, who have subsequently used these crossings. The Maoris have now two permanent settlements—at Arahura in the north, and Makawhio in the south, of Westland. They have adopted European habits, reside in comfortable houses, are well-educated orderly citizens, partly living on rentals, and partly by the cultivation, of their reserves. The greater number are located at Arahura, where they have the advantage of church and school.

About the period 1840 to 1850 the seaboard was fairly well known to the whalers and sealers, who then found profitable work along the coast. Casual explorers and others afterwards visited the region, coming by sea and land, mainly with a view to establishing pastoral settlements; but they found no inducement to remain. The discovery of gold in 1864, however, led to an enormous influx of miners, who flocked in from all parts of the world, and in a short time there was an estimated population of forty thousand young and hardy men. The result of their search was the discovery of numerous deposits of gold, and as a consequence clearings were made, townships built, harbours improved, roads, bridges, and tracks constructed. Although after the first flush of success the population has dwindled, yet year by year the country has progressed. Gold-mining now is conducted on more scientific principles, with the attendant establishment of extensive coal-mines, flax-mills and saw-mills, whilst farms now occupy the straths of the rivers. Telegraph-lines, railways, and coach-roads are rapidly overtaking the narrow bridge-tracks which extend and are being extended all over the district.

Westland is intensely interesting to all and every class. To the geologist, in the striking difference of rock-texture, every variety being represented and easily scanned in the frequent sections laid bare in the ravines bordering the different routes; in the numerous hot springs, which here, as in all other deeply eroded ranges, ooze from decomposing sulphides in the pressure-heated strata; and in the many forms of ice-action which have left record of past and present glaciation.

The botanist will be interested in the varieties of alpine lichens, mosses, grasses, flowers, and shrubs; the dwarfed mountain forest and flora, with the tangle of subalpine underbrush; the tree-dotted openings in the valley-bottoms; the heavy milling-timbers of the lowlands, with their wealth of parasitical plants, festoons of creepers, and close undergrowth; the sedges and aquatic plants fringing the lakes, streams, and lagoons; and the varied ferns, from the giant tree-fern near the coast to the tiny moss-fern on the high Alps.

The naturalist will find the ornithology quaint and beautiful—the diminutive rock-wren, the kea, and the kakapo on the ranges, the kiwi, the white heron of the coastal waters, and the wild-fowl of the streams and rivers, with hosts of intervening bird-life. On the beaches and in the tidal pools of the south are shells, whilst rookeries of the fur and other seals are also to be found.

To the artist this land presents manifold subjects of diversity and beauty. None need fail, either with brush or lens, to carry away interesting mementoes of land and sea scapes and pictures of unique interest, portraying the surroundings of the gold-miner and the settlers' homes.

For the mountaineer this is an endless field for activity. He may make his excursion short or far-reaching—either following the few beaten routes, or breaking new ground and climbing the virgin peaks.

The settler will find areas of excellent land suitable for farming, and under the present land laws, by industry and thrift he can redeem an independency from the country now under forest.

The miner will also obtain an outlet for his knowledge in the mineral belts which traverse the mountains right through and contain almost all known metals. He may exploit the coal-bearing regions, or try for gold amongst the quartz in the ranges, the gold-bearing gravels of the terraces, or the auriferous sands on the sea-beaches.

The sawmiller has a great extent of forest lands containing quantities of saleable timbers, which only await working.

Physical Features—Mountains.

The main range (Southern Alps), which is the dividing elevation or backbone of the South Island, constitutes the eastern boundary of Westland for its entire length. This mountain-system is snow-covered almost from end to end, and its ice-clad lofty peaks uplift from the snowfields which cap the less abrupt elevations, and which fill the immense intervening hollows (*névé*s). Subsidiary ranges, varying in height, radiate chiefly from "knots" in this great central chain, and are snow-coated most of the year. From these again, ridges covered with dense alpine forests descend steeply into the valleys or fall abruptly to the level of the inland plateaux of the littoral country. The westward faces of these spurs at one time formed the sea-wall. From the sheets of *névé*-snow alluded to above, numerous glaciers, with feeders from the lateral ranges, extend down the upper main valleys, presenting every aspect of ice-action, and from these the principal rivers take their rise. Parallel with the central mountain-mass, and linked to it by low narrow saddles in the northern districts, are isolated mountains, varying in extent and height, which are the remnants of an ancient continuous granite range that extended along the old coast-line. The bold, flat-topped Paparoa Range, lying between the central Grey Valley and the sea-coast, is another island mountain. With the exception of this Paparoa Range and a few outrunners of the central chain, the whole of the above-mentioned areas may, from a settlement point of view and apart from minerals, be considered barren mountain-wastes.

Rivers.

A few of these lead from the foothills, and are of small volume; the others are snow-fed streams descending from the central range, at first in narrow gorges amongst the mountains, but spreading widely on reaching the seaboard country. They are shallow shingly streams in winter, but swift and deep in summer. In the northern district all the larger rivers are bridged; and southward, ferries are placed on all the main streams, which from the melting of the snow are practically unfordable from September to January. Under the heading of "Harbours and Ports," *post*, are described those tidal rivers which are available for over-sea shipping.

The Westland rivers and their feeders, flowing with great speed and volume, and being frequent and constant, could easily and cheaply be harnessed for the supply of electric power for the whole of the South Island.

Climate.

The climate is equable and temperate, free from storms and fogs. Immediately after bad weather the clouds roll inland, and there is a prevailing clearness of sky, without wind. The rain-bearing winds are mostly from the north-west and north-east. The southerly winter gales usually coat the ranges with snow, which, however, rarely falls below 2,000 ft. Frost is infrequent and slight along the coast, and a light snowfall has only reached the seaboard once in twenty years.

The rainfall averages 112 in. per annum, and falls for the most part at night. It is undoubtedly heavy, but does not last, as it is very thorough,

and there is none of the long-continued drizzle of the south, from which the adjacent dividing-range completely screens the West Coast.

The following figures exhibit the average temperature for the past few years: Mean temperature in shade in summer, 55° ; in winter, 48.5° . The average number of days on which there was no rainfall is 200. Old residents and visitors alike esteem the climate of Westland, at all times of the year, to be most healthy and enjoyable.

Lakes.

The principal are Lakes Christabel, Hochstetter, Ahaura, Haupiri, Brunner, Poerua, Kanieri, Mahinapua, Ianthe, Rotokino, Whahapo, Mapourika, Paringa, Moeraki, and Ellery, with Saltwater and Okarito Lagoons. These and a considerable number of smaller ones are dotted over the district. All vary in character—mountain tarns, coastal tidal lagoons, shallow reedy sheets, deep mountain-girt waters—all are more or less forest-locked, and present every form of lacustrine beauty.

Some of these waters are fairly deep, and sound more than 300 ft. below the sea-level.

The deeper lakes occupy the basins scooped out by ancient glaciers that have receded ages ago. Some, again, are slowly filling up with the shingle, &c., poured into them by the mountain rivers and streams, whilst others are rising very slowly but definitely; and a few are only remnants of very extensive sheets of water, as the high marginal lake-formed terraces prove.

In conjunction with their effluents these lakes form valuable waterways for the transport of timber and goods. Eventually, the bulk of them will be used for electric-power purposes.

Soils.

The pastoral highlands have a coating of fine mould, and this continues fairly good down to the heavy-timber line.

Where these lands have a fall or a porous subsoil they produce a fine sward of alpine grasses, which are yearly increasing the cap of rich humus so characteristic of this district. The lower flanks of the mountains hold a thinner and less fertile soil. Although these and the lower heights are somewhat abrupt and unfitted for cultivation, yet when cleared of bush and exposed to the sun and air they improve rapidly, and will eventually become good sheep-country. There are scattered areas of hilly lands, more or less extensive, which are of limestone formation. Although unsuitable for agricultural purposes, they are coated with splendid grass-growing soils. These limestone areas are becoming much appreciated by the older settlers, who are using the lime to fertilize their pastures. In the formation of soils there have not been, as in other countries, countless herds of animals to depend upon. Only the bones of a few birds and rats enrich them—hence their paucity of bone-producing properties.

A margin, varying in width, of gentle slopes and "fans" fringes the base of the foothills. Here the soil is a rich vegetable mould, and proves most productive when properly tilled.

Stretches of good alluvium, composed for the most part of arable free-working soils, border the rivers, streams, and sea-coast. These are well adapted for oats and root cropping.

Pastoral Lands.

The total area of pastoral land now unallotted amounts to 679,200 acres, about 79,200 of which constitute scattered high mountain grass districts; the balance, 600,000 acres, being the ordinary bush-clad country, much of which is quite inaccessible to stock. All over the coastal lands, along the slopes of the lower hills and in the bottoms of the inland valleys, large numbers of cattle are bred and fattened on the dense undergrowth of the forest. The tussock herbage of the high lands above the timber-line is at present lying waste. In the past one or two attempts that have been made to utilize this

country have failed, because the sheep were left there to brave the winter snow-storms, the owners having become careless owing to having successfully wintered their stock in previous mild seasons. Sheep may be safely pastured on these high lands for eight months in the year, but feed must be provided for them in the low country for the remaining four. There are one or two farmers who are successfully following this method, and there is ample scope for settlers to copy their example. Hitherto sufficient attention has not been paid to the breed of sheep most suitable for these mountain pastures.

Some of the richest soil in Westland is on the middle mountain-slopes, and eventually, when these have been cleared of the scrubby stunted timber and grassed, stock may run quite safely throughout the year.

Pastoral Runs open for Selection as on 1st April, 1911.

There are forty-eight pastoral runs at present open for selection, varying in area from 5,000 acres to 55,000 acres, the annual rentals of which average £1 per 1,000 acres for terms of ten to twenty-one years. Detailed descriptions of each run, as to locality and nature of country, are published in the Crown Lands Guide, which may be obtained at any Land Office. Any further desired information will also be promptly supplied on application to the Commissioner of Crown Lands at Hokitika.

Agricultural Lands.

The agricultural lands comprise some 219,400 acres of forest and 11,500 acres of open surface, such as swamps, grass-grown river-beds, and fringes, &c. The bulk of these lands, when cleared of bush, grow root-crops, especially turnips, which are much used for fattening purposes. The even and moist temperature encourages the almost uninterrupted growth of grass and clover, which are very luxuriant, and favour stock-raising. Year by year the imports of potatoes, fruits, butter, and fat stock are decreasing, owing to increased local production.

The settlement of these lands is progressing remarkably, and farmers are now located in almost every valley in the district. These pioneers are very successful in the main, possess comfortable holdings, and evidence further progress by the importation of pedigree stock of all classes, and of agricultural machinery, and by the establishment of dairy factories and creameries. No intending settler could do better than make an inspection of these farming centres, view the local methods of reclaiming the country, and obtain an encouraging object-lesson as to the future from the prosperous homesteads established by the efforts of our early settlers.

The whole of the Westland District is a proclaimed goldfield. Hence before dealing with any portions of the agricultural lands noted above for settlement purposes these various areas have to be withdrawn from mining operations. This is done from time to time as settlement demands, after duly safeguarding the mining and sawmilling interests by the exclusion of all known auriferous lands and blocks of saleable milling-timbers.

Under the provisions of the land laws special facilities are afforded in Westland to selectors with the most limited capital to obtain a holding, which when laid down in grass is a moderate and sufficient independency.

Crown Lands for Selection.

On 31st March, 1911, an area of 730,639 acres was open for selection, and, in addition, an area of 93,987 acres still remained for future disposal.

Forests.

Generally speaking, the whole of the district is covered with dense forest, from the sea-beach to the grass-grown tops of the high ranges, even the broken mountain-faces being wrapped with foliage. The varieties of trees differ considerably according to soil and altitude. Kamahi and rata are the chief timbers—very useful for firewood—and, being spread over the whole

district, constitute an almost inexhaustible supply. Rimu is the chief milling-timber, and this also is widely distributed from the seaboard to the interior uplands. Valuable stretches of kahikatea belt the low-lying coastal lands, and the same may be remarked concerning the imperishable silver-pine. Clumps of matai are met with, also rarer patches of totara, while cedars are scattered along the flanks of the inland ranges and all over the lower hills and plateaux. The approximate area of forest is over 2,250,000 acres, of which a fair proportion carries timber fit for the sawmill, the remainder being mainly firewood and mining timbers and dwarfed alpine bush.

The sawmilling industry has advanced considerably. With the contemplated early extension of existing railway-lines and main roads, and the improvements of southern harbours and waterways, it will undoubtedly still further progress. Westland is well fitted for an expansion of this industry, as the forests extend over the whole district. Coal is located in many places, whilst the power derivable from the rivers and streams, either direct of by electricity, is practically unlimited. The isolation of the district, limited means of transport, and want of good harbours at present act against the utilization of the areas of marketable timber south of Ross; but this is only a temporary obstruction, and ere long means will be adopted to cope with these difficulties.

The sawmills at present in operation (save five smaller ones) are located in proximity to the running railway-lines. The millers are gradually extending their operations into the back country of the northern district, whence the haulage to the railways and ports is conducted by means of light railways, tramways, traction-engines, and water-carriage, *via* lakes and streams.

Rimu is the timber principally cut by the mills, and is accounted of very fine quality; but large quantities of kahikatea (white-pine) have been milled during the season, and exported to Australia for butter-boxes. A few of the smaller mills cut silver-pine railway-sleepers only. A certain quantity of black-birch, matai, &c., has also been utilized, but not largely. A few mills are run by water-power, but the bulk of them use steam.

The appended summary shows the present position of the industry in Westland:—

Number of Mills.	Number of Hands.	Horse-power.	Cutting capacity. Super. ft.	Output per Annum. Super. ft. about
46	950	920	100,000,000	White-pine Silver-pine Rimu, &c. } .. 60,000,000

Of the above fifty mills, five work part time, and forty-five work full time.

It is estimated that 1,150 hands are employed either about the mills or in cutting firewood, fencing-posts, railway-sleepers, bridge piles and braces, telegraph-poles, and blocks for houses; while many are wholly engaged in furnishing the props, sluice-blocks, and other timbers required for the coal and gold mines. From a settlement point of view alone these lumberers and their families are consumers of all kinds of farm-produce, and thus form a local market for the farmers.

Flax-milling.

There are eleven flax-mills, mostly at present running intermittently.

Dairying.

The dairying industry has called into existence progressive butter-factories at Arahura, Kokatahi, and Greymouth (lately transferred from Totara Flat), creameries at Koiterangi and Rotomana, and a cheese-factory at Harihari, in the Inter-Wanganui District.

Means of Communication.

Steamer Access.—Hokitika and Greymouth are the principal shipping centres, and steamers of various lines trade daily between the latter port and the other ports of the Dominion. A subsidized steamer runs between Hoki-

tika, Okarito, and the southern ports as far as Jackson's Bay, plying every two months, thus enabling miners and settlers to obtain supplies, and the latter to ship their cattle and produce to market. The Government steamer also calls at Big, Jackson's, and Bruce Bays on her quarterly trips from Dunedin and Bluff. Cargo-craft of various tonnage, with and without auxiliary steam-power, likewise make periodical calls at Hokitika and Greymouth.

Railways.—Hokitika to Greymouth (24 miles).—This line, with the exception of a loop midway to connect with Kumara, runs parallel to and only a short distance from the ocean-beach. Many interesting phases of old and modern gold-workings are passed through along the base of the wooded terrace which at no far-distant date formed the shore-line. Sundry small farms and wayside holdings are on either hand, and lumbering and gold-mining takes place on the plateaux and in the gullies for miles inland all the way through, numerous flag-stations affording termini for this side traffic.

And herabouts, as elsewhere in Westland, there are clusters of miners, farmers, and wood-cutters, whose workings and clearings lie scattered far back on the terraces and amongst the hollows of the surrounding forest, of whom the passing traveller is unaware.

The line is now extended southward to Ross, and open for traffic, a distance of sixteen miles, rendering an immense area of milling-timber available, reviving the mining industry, affording economical carriage of material and coal, and enabling large numbers of fat stock to be railed to the northern markets.

Greymouth to Runanga (5 miles).—This short line connects with the State Coal-mine in the vicinity of the newly established Township of Runanga, which lies to the north-east of the Port of Greymouth. An extension, three miles long, is approaching completion.

Greymouth to Reefton (46 miles).—This railway taps the central and lower valley of the Grey River, *via* Brunnerton, Stillwater, Ngahere, and Ahaura, as well as six minor stations within the Westland District. A great tonnage of coal from the Brunner and Blackball mines, large quantities of timber from the numerous sawmills, gold-mining material, green flax, farming-produce, stock, and goods, besides a large number of passengers, are railed along this line. A further section (Reefton to Inangahua Junction) is in course of construction. A branch line now connects Ngahere with Blackball (length about $2\frac{1}{2}$ miles).

Greymouth to Otira.—This line branches from the Reefton line at Stillwater, and proceeds up the Arnold Valley, *via* Lake Brunner and Taramakau Valley, to Otira (42 miles from Stillwater, and 51 from Greymouth). Large quantities of timber are brought down, this section from the numerous sawmills that are established alongside of the line. Stock and produce also swell the amount of traffic, and there is also a considerable and increasing number of passengers travelling to and from Christchurch by the overland coach, which connects the present termini of the railways at Otira and Cass, a distance of 26 miles.

The railways in course of construction in connection with the Westland system include the extension of the Greymouth-Reefton section down the valley of the Inangahua River (20 miles) to the Buller Valley—a very convenient and promising line. There is also the link (26 miles) between the Otira and Cass termini to complete communication between the east and west coast. This includes the tunnel at Arthur's Pass through the main range between the Otira and Bealey Valleys, now under construction.

Roads.—An arterial road extends throughout Westland from the Upper Grey Valley *via* Ahaura, Greymouth, Kumara, Hokitika, Ross, and Okarito, down to the Haast River, and thence partly by sea-beach and rough tracks almost to Big Bay, on the confines of Otago. This thoroughfare is fit for vehicle traffic down to the Waiho, but southward of that river it is merely a horse-track. The rivers in the northern district, as far as the Waitaha, are all bridged; below that point ferries are placed on all the large streams,

so that access is safe and uninterrupted right through, *via* Haast Pass, to Otago. The Waikukupa River is now bridged. The bridging of Wanganui River has now been started, and the completion of this work will prove a boon to settlers and the travelling public.

Three roads only have been made across the island leading out of Westland. One, a coach-road, runs from Hokitika *via* Kumara to Christchurch. The others are bridle-roads, one of which at present is out of repair and impassable, leads up the Ahaura Valley *via* the Amuri Pass into North Canterbury, and the other, in fair order, proceeds from the sea-coast up the Haast Valley *via* the Makarora River to Pembroke in Otago.

Numerous short dray-roads and horse-tracks branch from these trunk lines to the various mining and settlement centres, while the sea-beach and open shingle river-beds likewise give access to the adjacent country. Sundry dips and *cols*, varying from 1,800 ft. to over 7,000 ft. in height, leading across the Southern Alps, have been explored and mapped, and during the summer months are repeatedly crossed by experienced mountaineers. Of these depressions the only subalpine saddle is Haast Pass, all the others being liable to blocks by winter snow.

Four rough foot-tracks, blazed through the bush and partly benched, go across into Canterbury, as follows: (1) *Via* Arahura and Browning's Rivers over Browning's Pass into the Wilberforce Valley; (2) *via* Hokitika River over Mathias Pass into Mathias Valley; (3) *via* Whitcombe River over Whitcombe's Pass into Rakaia Valley; and (4) *via* Copland River over the main divide to the Hermitage in the Tasman Valley. Improvements on the latter road are now well in hand for the convenience of tourists contemplating an all-round journey. As a whole the West Coast roads are smooth and level, and, passing through rocky and gravelly districts, are free from mud and dust.

Coach Traffic.—Coaches three times a week connect with Canterbury *via* Arthur's Pass, and also ply daily between Ross, Hokitika, Kumara, Greymouth, and the neighbouring towns. Once a week a mail is despatched by coach to Okarito and thence conveyed on horseback southward to Paringa, and once a fortnight to Jackson's Bay.

Telegraph-lines.—These extend along all the trunk road-lines in the north, with numerous telephonic connections with side districts, and south as far as the Okura.

TOWNS.

Greymouth.

Greymouth is situated on the south bank of the Grey River. It was proclaimed a borough in 1868, having an area of 2,000 acres, of which about 500 acres is a Native reserve, and the remaining portion freehold. The tenure in the Native reserve is leasehold in perpetuity, with revaluations every twenty-one years, somewhat after the manner of the Glasgow leases.

Blaketown, within the borough area, is situated on Municipal Reserve No. 51, having a frontage to Tasman Sea of about a mile. About 30 acres of this reserve has been subdivided into quarter-acre sections, and let for twenty-one years at £1 per annum each, with renewal of lease for further periods of twenty-one years at a revaluation of rental. Of this area a considerable number of sections have been taken up by workmen, who have erected substantial cottage-homes thereon. The municipal authorities, by this method of leasing the land, are encouraging workmen to provide homes for themselves.

The rising Township of Cobden, which is built on the north bank of the Grey River, immediately abreast of Greymouth—to which it is linked by a fine cylinder bridge—may be considered a suburb of the borough. It contains a population of 987, and is principally occupied by the residences of Greymouth merchants and tradesmen.

Greymouth is the principal import and export town of Westland, and is a flourishing mining centre, having a present population of 5,469. The

unimproved value of rateable property on 31st March, 1911, was £227,093, capital value £665,587, and municipal revenue £25,771 per year. The borough is connected by rail with Ross, Hokitika, Kumara, Grey Valley, Reefton, Moana, Otira, and the State coal-mine at Runanga, and on three days in each week Christchurch can be reached in one day, *via* Otira, by coach and rail. At the beginning of the century the Borough Council adopted a progressive policy, and borrowed money for drainage and water-supply works, which are now completed. The drainage is effected by the earthenware-pipe system, with cement joints and trapped house-services. Some eight miles of sewers have been laid, to which 600 houses are connected.

The water-supply is taken from the Grey River. The filter is formed in a shingle-bed of the river, and the filtered water is then pumped up 286 ft. into a service reservoir which contains 800,000 gallons, and thence it is distributed through ten miles of mains all over the town. The pumps are driven by two 42 h.p. gas-engines fed from the Corporation gasworks.

The Council purchased the gasworks from a private company, and run them as a municipal concern. When purchased in 1900 the yield of gas was 7,500,000 ft., now it is 33,000,000 cub. ft. The value of gas sold is £8,441, and the revenue from gas and water is sufficient to pay the whole of the interest and sinking fund on the loans, and, as a consequence, the security rates have never been collected.

The town possesses some very fine buildings, notably the new town hall, municipal buildings, and library. The town hall is fitted as a bijou theatre, with a sitting-capacity of 800. The library and reading-rooms are very commodious and handsome, and were rendered possible by the gift of £2,500 towards them from Mr. Carnegie. The library is supported by a library rate of 1d. in the pound.

The new post-office, now complete, is a splendid building, and the tower contains a four-face chiming clock of 6 ft. diameter.

The Anglican and Roman Catholic Churches deserve special mention; the latter is a brick-and-compo building, with a very fine spire. Other fine buildings are the Grey River Hospital, Grey District High School, Convent School, Gieseking's and McDonnell's buildings, and many other substantial edifices. Tainui Street and Mawhera Quay—which faces the port—have been almost wholly rebuilt during the last few years, and present a fine appearance, whilst the number of comfortable up-to-date residences recently built give a most pleasing aspect to this prosperous town.

A monument, in a central position, containing four drinking-fountains, modelled and cast by McFarlane, of Glasgow, commemorates the Duke of York's visit, the King's Coronation, Trooper Martin (killed in the Boer War), and Peace Day (Boer War).

The town has a telephone exchange, which is in general use.

There are sixteen miles of streets in the borough, which are formed and gravelled, and the Council have decided to finish the principal streets with tar-macadam. The streets are well lighted with gas.

One of the Government Railway Workshops is located here, with a number of local industries.

A description of the Port of Greymouth will be found under ports.

Hokitika.—This town is situated at the north mouth of the Hokitika River, bordering the sea-beach. It contains a population of 2,291, and is mainly dependent on the adjacent sawmills, flax-mills, farming settlements, and gold-mines. A considerable trade is also done by sea with the miners and settlers in south Westland, for which district it is the shipping-port. It possesses convenient structures, such as a drill-shed, theatre, four churches, convent, and school, as well as a commodious town hall, containing the Corporation offices. A fine building, the gift of Mr. Carnegie, contains the free public library, reading-room, and museum. Another handsome structure is the public offices, at the front entrance of which is a statue in Italian marble of the late Prime Minister, Mr Seddon. The town is lighted with gas, and has a telephone exchange. A fine clock-tower, with chimes, has been

erected in the centre of the town in memory of the Westland troopers who fell in the Boer war. A very handsome building encloses the High and State schools. On a high terrace immediately north of the borough are situated the hospitals and gaol, all of which, with their many detached buildings, gardens, and grounds, are beautifully kept. There is a fine central park—the recreation-ground of the place. As the suburban dwellings are surrounded by gardens the town has a most pleasing aspect. It enjoys grand views of Mount Cook and other dominant peaks, and from the terrace on the Town Belt the panorama of snow-capped mountains is one of the finest in the world. Excursions by road and water can be made to the adjacent beauty-spots and Lakes Kanieri and Mahinapua, which are unrivalled in their different scenic aspects. On the eastern boundary of the borough is the racecourse, which is well equipped and pleasantly situated. The local industries comprise sawmills, flax-mills, sash, door, and furniture factories, foundry and engineering shops, fish-cannery, coachbuilding, bone-mill, breweries, and coffee and spice works. Hokitika is connected with Greymouth and the north by railway, and also with Ross. In connection with this latter extension a fine combined railway and traffic bridge has been erected across the Hokitika River, and proves a great convenience to the townspeople and suburban residents. A splendid water-supply from Lake Kanieri (14 miles) has now been established, and improvements in sewerage and street access are in progress.

Brunner.—Situated on the banks of the Grey River, seven miles above Greymouth, includes the villages of Dobson, Taylorville, and Wallsend, and contains 1,007 people. This town is wholly dependent on the adjacent coal-mines and their allied industries of coke-burning and brick and tile making. The output of these mines and the manfactories is sent by rail to Greymouth, where the bulk of it is shipped. The mineral traffic causes this short branch to be one of the best-paying railway-lines in the Dominion. Two fine suspension bridges across the Grey River link the townships together, one being a railway and the other a foot bridge.

Kumara.—This compact little town, of 783 inhabitants, with its suburbs of Dillmanstown and Larrikins, containing an additional population of 236, is placed on the skirts of what was once the largest alluvial goldfield in New Zealand. Main roads to Hokitika, Greymouth, and Christchurch radiate from this place, and a fine road of four miles connects it with the railway. The town is finally situated on a high table-land, and enjoys interesting views of mountains, and bush-clad plateaux, river, valley, and ocean. Hydraulic gold-mining is carried on here on an extensive scale, the greater portion of the water-supply coming many miles from the inland mountains. Sludge-channels have been made to carry away the tailings. This industry gives employment to a large number of men, and also provides lucrative work for sawmillers and mechanical engineers. Kumara has finely equipped and well-built schools, hospital, library, and school of mines.

Ross.—Population, 643. A township situated at the foot of the northern slopes of Mount Greenland, 150 ft. above and one mile distant from the sea. It occupies a very sunny sheltered position, and is famed for fruit and flowers. It is essentially a gold-mining centre, and extensive sluicing is carried on. Right under the town area are various layers of auriferous drifts, partly worked, but at present waterlogged.

Blackball.—Population, including Roa and Paparoa, 1,039. A township in the Grey Valley mainly dependent on the coal-mines in its vicinity. A railway and traffic bridge has been constructed over the Grey River, and a branch line about two miles and a half long now connects the town with the Main Trunk Railway.

Runanga.—The Township of Runanga is situated in the midst of undulating timbered country, and surrounded by an extensive circle of bush-hills about four miles and a half to the north-east of Greymouth, its port of export, with which it is connected by rail and by a good metalled road. Adjoining it as a suburb on the north side is the private Township of Dunollie.

within a mile distant to the north-east are the State collieries, whilst some two miles to the north lies Point Elizabeth, the site of a very possible harbour. The town was compactly laid out some seven years ago, and since that date has made rapid progress, until now its population is 1,622, including Dunollie. Its buildings and State mines comprise generally substantially built workmen's houses, whilst prominent amongst the other structures are three churches, a fine and well attended State school, a miners' social hall, and several general stores. The railway has now been extended some three miles beyond the State collieries in order to tap further valuable and extensive coal areas. Runanga is at present under State control, but has strong aspirations for borough government.

In addition to the towns already enumerated there are many small mining and sawmilling centres, such as Ahaura, Hatters' Terrace, No Town, Stillwater, Kokiri, Nelson Creek, Moana, Noble's, Orwell Creek, Twelve-mile, Stafford, Kanieri, Woodstock, Rimu, Blue Spur, Okarito, Gillespie's, &c.

Ports.

Greymouth.—Twenty-four miles north-east of Hokitika. Extensive harbour-works have been carried out. A breakwater or sea-wall extends some 3,542 ft. seaward from the mouth of the river on the south side, and on the north side 1,400 ft. with internal half-tide training-walls, the result being an average depth of water on the bar of 22 ft. at high water and of 13 ft. at low water. Vessels of 1,500 tons can come alongside the wharf. There is a berthage accommodation of 2,770 ft., with a minimum depth of 12 ft. to 16 ft. at low water. Additional harbour-works are now in progress, including the construction of a dock basin and the extension of the north training-wall for a proposed distance of 200 ft. The principal exports are gold, coal, coke, and timber. The number of vessels that entered the port during the year 1910 was: 765 steamers, tonnage 379,589; 34 sailing-vessels, tonnage 4,227: being a total tonnage of 383,816 for the year. The train runs on the wharf, and the coal-trucks, specially made for the purpose, are lifted and emptied into the vessel's hold by means of powerful hydraulic and steam cranes, of which there are five, with capacities of from $1\frac{1}{2}$ tons to 12 tons, so that every encouragement is given to quick despatch.

The exports of Greymouth (1910-11) comprise: Coal, 407,129 tons; coke 2,800 tons; bricks, 1,040 tons; gold, 81,236 oz.; flax, 682 bales; wool, 1,276 bales; timber, 40,632,153 superficial feet; number of sleepers, 47,569. The imports comprise: General cargo, 55,873 tons.

Hokitika.—Two training-walls have been constructed, the one on the north side being about 2,000 ft. long, while that on the south is 677 ft. The bar is of shifting sand, and the depth at high water varies from 8 ft. to 14 ft., while inside the depth is from 6 ft. to 12 ft. for three-quarters of a mile from the entrance. For ten months out of the twelve the port is usually safe for vessels drawing 8 ft. to 10 ft. of water. The berthage-space amounts to 1,000 ft., with from 8 ft. to 12 ft. of water. The principal exports are gold and timber. Additional harbour-works are in progress, entailing an expenditure of some £40,000.

The imports for the year ended 31st March, 1911, comprised 1,803 tons of general merchandise. The exports comprised 1,606,000 superficial feet of timber, 150 bales of flax, 151 bales of wool, 34 boxes of butter. At present a good deal of the local and southern produce is railed direct to the Port of Greymouth, including gold to the value of £35,000.

The several succeeding places are each the port for the adjacent small mining and farming settlements, which are wholly dependent on the periodical steamers for their supplies and for the export of flax, timber, produce, and, at times, of fat stock for the northern markets. The Government steamship calls at the three bays noted below, and the local steamer from Hokitika visits all these minor ports every two and three months, whilst other steamers ply to such of these places as trade induces; but as all the rivers have bar entrances the working of them is intermittent and often precarious.

Okarito.—Fifty-five miles south-west of Hokitika. A bar harbour, sometimes completely blocked by a high sandbank thrown up by heavy seas. When open the entrance is good, with a maximum depth of 10 ft. There is a small jetty about half a mile from the entrance. The sand and pipi bank has been removed.

Bruce Bay.—Ninety-five miles south-west of Hokitika. An open roadstead, well sheltered from the south and south-westerly winds by Heretaniwha Point, which juts out fully a mile to the southward. Good anchorage in 18 ft. of water opposite the Green Rock, which stands up out of the water. Good boat-landing with the above-named winds on a smooth sandy beach.

Paringa River.—104 miles south-west of Hokitika. Open roadstead. Vessels coming in and out should give Hanata Reef (off the North Head) a wide berth. There is also a sunken reef, awash at low water, in the middle of the bay, and a dangerous sunken rock just off the South Head, two or three chains away, facing a small sandy bay, and right abreast of the trig. station. Vessels lie inside and a little to the northward of this rock, about a quarter of a mile from shore, and are quite safe with southerly winds.

Haast River.—118 miles south-west of Hokitika. A constantly shifting bar at entrance, which is nearly opposite and a little to the southward of the Alhambra Rock. This rock stands well out of the water, and vessels entering can go on either side with safety. Average depth of water on bar from 6 ft. to 8 ft.

Okuru and Turnbull Rivers.—139 miles south-west of Hokitika. These rivers join just inside the entrance. Good, straight channel; average depth, 8 ft. to 10 ft. The port is well sheltered by Open Bay Islands, which lie about three miles away, just opposite the entrance, bearing a trifle west of north. A dangerous reef lies about two miles and a half from the south-west point at the smaller island, and immediately to the north-west of a line drawn from the last-named point to the extreme end of Jackson's Head.

Jackson's Bay.—153 miles south-west of Hokitika. Good shelter and anchorage, open only to north-east, with 12 ft. of water within a few chains of shore. Jackson's Head runs out about one mile and a half in a north-easterly direction from the southern end of the bar. This is the only ocean harbour on the coast of Westland, and could be converted into a first-class port at comparatively small cost. No doubt Jackson's Bay will eventually form a great coal-port, as indications of coal are found from the Bay to Tauperikaka, a distance of thirty miles. Moreover, the recent discovery of a practicable pass through the main range, *via* the Waiatoto and Axiu Rivers, will make it in the near future the natural outlet for the Lake Wanaka country.

Big or Awarua Bay.—200 miles south-west of Hokitika, at the extreme south-west corner of Westland. An open roadstead, sheltered from east and south-west winds; 24 ft. of water on south side anchorage, and 30 ft. on north side just opposite Crayfish Rock, in a spot sheltered from northerly winds.

Steamers have also in past years entered the Taramakau, Waitaha, Wataroa, Wanganui, Waiatoto, Arawata, and Cascade Rivers, all of which have bar entrances. Goods and passengers are also landed at the roadsteads of Saltwater, Gillespie's Beach, and Abbey Rocks.

Minerals and Mining.

The whole of the District of Westland is a proclaimed goldfield, and contains the greatest area of alluvial auriferous ground on the West Coast.

Specimens of nearly all the known minerals have been discovered in various localities. The Papāroa Range, north of Greymouth, contains many varieties, and will eventually hold a large mining population.

Copper also occurs in the Taipo, Arahura, Toaroha, Whitcombe, Wanganui, and Jackson Valleys, the finest lodes discovered being on the western faces of the Matakitaki Range, near the Haast River, with good seams and beds of coal and limestone adjacent.

Petroleum has been found in the Arnold Valley, and borings are now being made to test and develop what is hoped may be a good oil-bearing basin.

All the Westland rivers carry down more or less gold, but the three great gold-yielding rivers are the Grey, Arahura, and Waiho, the bars and beaches of which appear to be replenished with fresh deposits of the metal after each flood. Every stream in the Grey Valley is auriferous, and the gold-bearing nature of the adjoining gravels is evidenced by the old and new workings which are scattered all over the watershed. Again, if one stands on the summit of Mount Turiwhate, the ancient beds of the Arahura can be easily traced northward to the Kumara and southward to the Rimu diggings. Similarly, the Waiho has in olden times flowed both northward down the present valley of the Okarito River and southward to the Omoeroa River, the lateral terraces in both directions being well defined and gold-bearing.

There are three main gold-bearing deposits in Westland. The first, which may be called riverine leads, run generally westward. These are ancient river-beds, often lying at a considerable elevation, of which the bulk has been washed away, leaving detached portions, as Kumara and Rimu. The second are beach leads, both those along the present coast-line and others running parallel thereto at distances varying from one quarter to four miles inland, and at levels from a few feet below to a couple of hundred feet above sea-level. The third are extensive masses of gravel, &c., occurring in large isolated patches, as at Bell Hill, Big Dam Hill, Humphrey's Gully, and Bald Hill, north of the Haast. These drifts have all one noticeable peculiarity—namely, that they invariably coat the seaward faces of the hills, and neither gold nor drift is to be found on the inland slopes. Gold-bearing fans from Mount Greenland have been found at different levels on Ross Flat, having probably been deposited in deep water by successive land-slides.

Hydraulic mining on a large scale is successfully carried on in various portions of the northern districts, and is being extended to many other localities. Kanieri Lake is being again utilized, and an abundant quantity of water is now available for the sluicers in the Kanieri Valley. The extension, now surveyed, of the Humphrey's Gully water-race to Rimu and Back Creek will develop a very large field. The tapping of the Arahura River will enable the miners at Blue Spur to obtain an unfailing supply of water, and command a large area of auriferous country at present unworkable from want of water at a sufficient altitude. A large acreage of alluvial drift has been pegged out as dredging claims. Some companies are at work with more or less profit. Experts are assured that a large extent of auriferous gravels exists all over the low-lying country which will yield remunerative returns by this treatment. Undoubtedly great areas of swampy, undrainable, and hitherto unavailable lands will be prospected, and it is expected that valuable finds will be made in such districts. Numerous and costly experiments have been made with dredges of different types in the endeavour to work economically the gold-bearing sands which lie along the sea-beaches for a distance of 140 miles, but so far without success. A considerable number of miners ("black-sanders") work on some of the beaches, and seem to make a fair living, many of them having been so employed in one neighbourhood for over twenty years.

Gold-bearing quartz has been found throughout the district, the most promising finds being at Paparoa, Mount Alexander, Taipo Range, Browning's Pass, and Cedar Creek. Silver-ores associated with gold have also been found, notably at Rangitoto.

At Browning's Pass deposits of auriferous quartz, known as "the Westland Reefs," have been traced for considerable distances, and are at present being prospected by several parties of experienced miners.

The amount of gold exported during the past year amounted to 88,466 oz., valued at £344,127.

First-class slate, suitable for any purpose, exists in the Upper Wanganui Valley and on the Paparoa Range. Fine pottery clays and fireclays are also in bulk on this range, and building-stone of all kinds, granite freestone, &c.,

is to be found all over the coast. Limestone also occurs in different localities, comprising qualities suitable for making lime and cement, and also for lithographic purposes. Greenstone (*pounamu*) is now largely exported for fine lapidary and jewellers' work, and commands a ready sale. Iron-ores occur in quantity in various localities.

Coal-mining.—As noted before, great quantities of coal are obtained from the mines at Brunnerton, and also from the fine seams at Blackball and Paparoa, higher up the Grey Valley. Extensive seams are now being developed at the State coal-mine in the Seven-mile Creek basin, and further along the coast. On the higher slopes of the Paparoa Range areas have been surveyed and leased, and large outcrops are being prospected. It would appear that the greater portion of the seaward country hereabouts contains very extensive coalfields—it undoubtedly contains the greatest area of coal-bearing strata yet discovered; but nevertheless all the way down the coast to Jackson's Bay, wherever the coal measures have been protected from the scour of the ice-streams of the great glacial period, isolated areas of coal exist, and possibly borings would prove the lower coal-beds to be intact under the overlying drifts. The large coal-mines now at work—viz., the Brunner, N. Brunner, Blackwall, Paparoa, and State coal-mines—are all finely equipped with the latest machinery, are directly linked to the main railway by branch lines, and produce great quantities of coal varying in character and suited for different economic purposes. Last year some 500,000 tons were raised and railed to various towns, but principally into Greymouth, whence it was shipped to places in and beyond New Zealand.

THE CANTERBURY LAND DISTRICT.

T. N. BRODRICK, Commissioner of Crown Lands.

Boundaries—Physical Features.

The Land District of Canterbury comprises the central portion of the South Island, and lies between the Conway River, Barefell Pass, and Mt. Franklin on the northward; the Spenser Mountains, Travers Peak, Mt. Barron, the Amuri, Hope, and Hurunui Passes, the summit of the Southern Alps, and the western watershed of the River Hopkins and Lake Ohau on the westward; the Rivers Ohau and Waitaki on the southward; and the South Pacific Ocean on the eastward. It lies between south latitudes $42^{\circ} 5'$ and $44^{\circ} 55'$, and east longitudes $169^{\circ} 45'$ and $173^{\circ} 30'$. The length of the district north-east and south-west is about 220 miles; the breadth W.N.W. and E.S.E., from the summit of the Alps to the sea, averages seventy miles. The sea-board has a length of about 300 miles, consisting generally of low-lying beaches, broken by the projection eastward of Banks Peninsula, which contains the only large natural harbours. That portion of the district which fronts the ocean between the Ashley and Opihi Rivers is flat land, about 2,500,000 acres in extent; north and south of those limits the plain is interspersed with undulating and hilly country. This great plain stretches westwards, rising and merging into downs and hills, which again extend westward and merge into the Southern Alps and the offshoots therefrom. Banks Peninsula, which has an area of about 250,000 acres, is wholly composed of ridges and hills, deeply intersected by basins and gullies, the result of volcanic action.

The Southern Alps, which form the backbone of the island, are a continuous chain of mountains, with a succession of magnificent peaks, attaining their culminating point in Mount Cook, or Aorangi, 12,349 ft. above sea-level; there are, besides, numerous peaks ranging in altitude between 7,000 ft. and 10,000 ft. Offshoots, extending to great distances eastward and south-eastward from the main range, attain elevations of 6,000 ft. to 9,000 ft. On these mountain ranges are numerous and extensive glaciers, from which

emanates the river-system of the district, comprising the Waiau-ua, about 100 miles in length; Hurunui, 85 miles; Waimakariri, 90 miles; Rakaia, 85 miles; Ashburton, 64 miles; Rangitata, 74 miles; the Waitaki and its main feeders, 140 miles. These rivers rush down from the mountain-gorges, through the intervening ranges and hills, and traverse the plains to the sea. The channels on the plains are shallow, and extend in some instances over a mile in width.

These rivers serve as outlets for a portion of the Lake system of the South Island, Lake Sumner being connected with the Hurunui, Lakes Cole-ridge and Heron with the Rakaia, and the Mackenzie Country lakes—Tekapo, Pukaki, and Ohau—with the Waitaki. Another important lake is that known as Lake Ellesmere, west of Banks Peninsula; it is separated from the ocean by a narrow shingle-spit only 5 chains across at one point, through which, at certain seasons, the flood waters force a channel to the sea. Lake Tennyson is situated on the eastern flank of the Spenser Mountains, 3,614 ft. above sea-level.

Climate.

The climate of Canterbury is well suited to Europeans. It resembles that of Great Britain, but on the plains is far more equable. Observations taken at Lincoln (fourteen miles from Christchurch) for a period of twenty-eight years, ending December, 1910, give the following results: Barometer, reduced to 32° Fahr. and sea-level, 29,920 in.; mean maximum daily temperature, 62.1°; mean minimum daily temperature, 43.5°; mean average temperature, 52.8°; mean range of daily temperature, 18.6°. The extremes of temperature were 98.4° and 19.9° Fahr. The rainfall for the same period averaged 25.555 in. per annum, the extremes being 35.287 in. in 1886 and 14.48 in 1897. The average annual number of days on which rain fell was 125, the extremes being 154 in 1902 and 98 in 1891 (G. Gray, F.C.S.). Snowfalls are very light on the plains, but in the high uplands the climate is much colder and more severe. The changes of weather and temperature are sudden, calms and gales, rain and sunshine, heat and cold alternating. The prevailing winds are north-east, south-west, and north-west—the last a hot wind. The climate, as a whole, is splendidly healthy, bracing, and most enjoyable.

Foundation and Settlement.

The district was occupied, in the first instance, by settlers sent out by the Canterbury Association, which was formed in 1848, and incorporated by Royal Charter in 1849, under the auspices of prominent men in England, including the Archbishop of Canterbury and Lord Lyttelton. The step was not taken until after due inquiry as to the most suitable part in which to establish a settlement. Captain (afterwards Sir George) Grey, at that time Governor, recommended the Wairarapa, but it was finally decided to take over from the New Zealand Company a tract of the Canterbury Plains, in the neighbourhood of Port Cooper. Captain Thomas, the agent of the association, who had advised the selection, superintended the surveys and the preparations for receiving intending settlers. The original intention of the founders was that the settlement should be independent and complete in itself, and should embrace only such persons as were members of the Church of England and were approved of by the association. This was frustrated by the influx of numbers of persons of all classes and beliefs. The first body of emigrants arrived at Port Cooper on the 16th December, 1850, and the settlement remained under the control of the association, as directed by a committee of management in England, and under the active personal supervision of Mr. John Robert Godley, until 1853, when the whole of Canterbury became a province of New Zealand by the provisions of the Constitution Act, 1852.

Thenceforward the control of the settlement was vested in the Superintendent and the Provincial Council. The first Superintendent was Mr. James Edward FitzGerald, who held office till 1857; he was followed in succession by Mr. William Sefton Moorhouse, 1857–1863; Mr. Samuel Bealey, 1863–

1866; Mr. Moorhouse again till 1868; and Mr. William Rolleston till the abolition of the provinces in 1876, when the district came directly under the control of the General Government.

Internal Communication.

In no part of New Zealand are the means of communication better than in Canterbury. The natural facilities of the country have been abundantly supplemented by railways and roads. Lyttelton, the chief port, is connected by rail with Christchurch, the heart and centre of the whole district. From Christchurch the main line extends northwards to Culverden, a distance of sixty-nine miles, with a branch from Waipara to Mina, opposite the Cheviot Estate (about thirty-five miles) open for traffic. Southward the main trunk line runs through Waitaki (139 miles) to Dunedin. These lines tap and serve the whole coastal district and the lands adjoining on the western side. In addition, eight branch lines have been constructed westward, and two lines south-eastward; the former, in most instances, extending to the foot of the hills. The Springfield branch has extended as far as the Cass, and will eventually connect with the West Coast system.

Combined with the railway system is a complete network of main, district, and subsidiary roads, extending into all parts of Canterbury. The total length of railways is about 520 miles, and the roads probably exceed 10,000 miles in the aggregate. The completion of this splendid system is due, partly to the foresight of the original settlers, partly to the exertions of the Provincial Government, and partly to the railway and public-works policy of the late Sir Julius Vogel.

Geological Formation.

According to the late Sir James Hector, the main western ranges are composed of Upper Palæozoic rocks, having at their base extensive plains of Tertiary fluviatile formation, with occasional protruding ridges of Upper Mesozoic, forming low mountain-ranges subordinate to the main axis. Banks Peninsula consists of basic volcanic rocks.

Area, Nature, and Disposition of Lands.

The area of the Canterbury Land District is 9,604,045 acres, of which the estimated area of forest land is 516,000 acres. Forest lands are found in Banks Peninsula and in the Mount Peel and Waimate districts, where the timber consists chiefly of totara and matai; at the sources of the Waiau-ua Ashley, Waimakariri, Rakaia, and Hopkins Rivers, at Lakes Ohau and Sumner, and near Springfield and Methven, the timber in these localities being mostly native beech; and near Oxford, where the beech is interspersed with rimu, totara, matai, &c.

The lands of Canterbury may be classed approximately as follows: First class, 2,046,071 acres; second class, 5,207,173 acres; third class (barren lands and lands of small value), 2,350,801 acres: total, 9,604,045 acres.

The disposition of lands on the 31st March, 1911, was as follows:—

	No. of Holders.	Area in Acres.
1. Lands held as freehold	...	3,727,377
2. Lands held on deferred payments	9	6,300
3. Lands held on perpetual lease	28	1,486
4. Lands held as leaseholds in perpetuity	1,431	278,280
5. Lands held in occupation with right of purchase	29	4,679
6. Lands held as village-homestead special settlements	326	12,445
7. Lands held as small grazing-runs and grazing-farms	143	261,636
8. Lands held on renewable lease	222	78,906
9. Pastoral licenses	107	3,375,466
10. Special-settlement associations	39	4,651

	No. of Holders.	Area in Acres.
11. Reserves and Crown lands held under temporary occupation licenses (area, 96,507 acres, included in 12 and 17)	709	...
12. Area of land reserved and granted under various Acts (exclusive of Midland Railway land included in 1)	...	1,361,541
13. Land purchased and disposed of under Land for Settlement Acts (included in 4, 7, 8, 10, and 11; 1,320 holders, 321,242 acres)	...	...
14. Workers' dwellings	30	7
15. Crown lands open for selection	...	957
16. Crown lands being prepared for selection	...	...
17. Barren lands, and lands for future disposal	...	490,314
Total	3,073	9,604,045

In explanation, it may be noted that No. 1 comprises the freehold lands conveyed, and that tenants of Nos. 2, 3, and 5, and some of those included in No. 4 have the right of acquiring the freehold, which is not the case with tenants of Nos. 4 (occupying lands acquired under the Land for Settlements Acts), 6, 7, 8, 9, 10, 12, and 13.

Soils.

The Southern Alps and mountains adjoining are, owing to their great altitude, subject to disintegration, and form for the most part rocky barren wastes.

The lower ranges and hills, the high tablelands, and the light stony portions of the plain form the pastoral areas.

In the northern and southern districts and in the great central plain are the agricultural areas. This latter class of land comprises rich alluvial tracts about Cheviot, Rangiora, Kaiapoi, Lincoln, Ellesmere, Longbeach, Temuka, and Waimate, and the splendid plain and down lands which extend from Cheviot to the Waitaki.

Banks Peninsula, where the soil is of a rich volcanic nature, though exceedingly hilly, has alluvial areas in the valleys and about the bays.

Pasturage and Crops.

Below a certain level, the mountainous and hilly regions, and the high upland country in the western and northern part, are covered by native grasses, with an admixture of English forage-plants where the character of the soil and other circumstances are favourable.

This pasturage, which is very suitable for sheep-farming, is taken full advantage of by the pastoral tenants of the Crown, and is used to some extent by freeholders. The light stony portions of the plain also contain native grass lands, well adapted to merino sheep.

The lower hills, downs, and better kinds of plain-country have been widely cultivated, and have proved well fitted for the production both of cereals and of grasses.

The chief crops grown in Canterbury District are wheat, oats, barley, turnips, rape, clover, and grass-seed; whilst amongst other crops produced are rye, peas, beans, mangolds, beet, carrots, and potatoes.

Of the cereals, wheat is the most largely grown, and was for many years a large item of export. In the season 1910-11 the area under crop for threshing was 229,876 acres, being over two-thirds of the total wheat-area of the Dominion. The estimated average yield was 26 bushels per acre.

Oats also are very successfully grown, the figures for the same period being 112,673 acres, or over one-third of the total area of this crop. The estimated average yield was 31 bushels per acre.

Barley of superior quality is also produced, the figures being 9,565 acres, equal to nearly one-quarter of the total area of barley-crop. The estimated average yield was 27 bushels per acre.

Grass-seeds are abundantly grown, cocksfoot mainly on the splendid Banks Peninsula country, and ryegrass throughout the land district.

Potatoes, which yield crops of excellent quality, were grown in 1910-11 on 9,435 acres; turnips and rape were grown on 212,817 acres; and a considerable area was sown in other crops, including rye, peas, beans, mangolds, beet, carrots, and onions. An area of nearly a million and a half acres had been ploughed and laid down in English grasses, and over half a million acres had been surface-sown. Plantations, exclusive of private gardens, occupied an area of about 18,000 acres. The aggregate area of private and market gardens, orchards, and vineyards over quarter of an acre in extent was over 7,000 acres.

Stock.

The pastoral and agricultural lands provide grazing and fodder for a large number of sheep, cattle, horses, and other stock. Of late years the value of the plains has been much enhanced and the carrying-capacity thereof greatly increased by the water-race system, which supplies water throughout the length and breadth of the dry areas, and enables the country to be occupied in smaller holdings than would otherwise be possible.

The following table shows the extent, cost, and other particulars regarding the water-race system in the several counties:—

County.	Area watered.	Miles of Races.	Total Cost.	Cost per Acre watered.	Amount of Water distributed every Twenty-four Hours.	Annual Charge for Use of Water.
	Acres.		£	s. d.	Gal.	
Amuri ...	24,162	60	5,000	3 11 $\frac{3}{4}$	...	Races are maintained by an annual charge in proportion to area watered.
Ashley ...	122,000	540	25,000	4 1	27,000,000	From $\frac{3}{4}$ d. to 6d. per acre, in addition to special rates for interest on loans.
Selwyn ...	410,300	2,100	84,000	4 1	97,200,000	10s. to £2 2s. 6d. per 100 acres.
Ashburton	586,000	1,750	45,100	1 6 $\frac{1}{2}$	100,000,000	£1 13s. 4d. per mile of race.
Geraldine	71,212	260	9,010	2 6 $\frac{1}{4}$	29,520,000	About 7d. per acre, including a rate for payment of principal and interest on loans, and a rate for maintenance.
Levels ...	19,000	71	5,500	5 9 $\frac{1}{4}$	6,480,000	2 $\frac{1}{2}$ d. per acre, and an interest-rate of $\frac{1}{4}$ d. in the pound on capital value.
Mackenzie	9,400	35	1,935	4 1 $\frac{1}{4}$	7,516,800	2 $\frac{11}{16}$ d. per acre on part of district and $\frac{1}{4}$ d. in the pound on capital value in remainder of district.
Waimate	23,398	125	6,021	5 2	6,700,000	Races are maintained by an annual charge on the value of lands watered.

The sheep in the District of Canterbury in April, 1910, numbered 5,272,087. In April, 1911, there were 73,368 horses, mules, and asses, 127,011 cattle, and 69,182 pigs.

The district has a well-deserved reputation for the classes and splendid quality of its sheep. On the mountains and higher lands the merino still predominates; but on the richer low-lying ranges, hills, and plains, the prevailing types are crosses between the merino and Leicester, Lincoln, Romney Marsh, and other breeds. In proof of the superior character of the flocks, pasture, and climatic conditions in the South Island, the following percentages of lambing returns are quoted—these are “fair average returns, but much higher might have been exhibited”: Mountain native pasture—pure merino, 75·36; pure merino and Border Leicester, 88·94: English-grass pasture—crossbred and Border Leicester, 80·8; half-bred Border Leicester, 82·79; Border Leicester, 90·77; Lincoln, 80·08; Romney Marsh, 111·46; English Leicester, 93·34; Shropshire, 97·41; Southdowns, 96·87. It must be borne in mind that the flocks and herds are supported by the natural and artificial pastures without housing.

Owing to the development of the frozen-meat trade a great impetus has been given to sheep-breeding. The bulk of the primest meat exported is supplied by this district, with Marlborough, and commands the highest price in the London markets. The frozen meat exported from Canterbury during the year ended 31st March, 1911, was valued at £1,510,345, besides which large quantities of preserved meats, tallow, manure, neatsfoot oil, oleo, &c., were produced.

At Belfast, Fairfield (near Ashburton), Islington, Timaru, and Pareora freezing-works are established, each containing a complete plant for carrying on the industry, as well as departments for curing, preserving, boiling-down, tallow-rendering, fellmongering, and the manufacture of manures. The Canterbury Frozen Meat and Dairy Produce Export Company (Limited) owns the Belfast Freezing-works, with storage for 110,000 carcasses, and a daily capacity of 5,500 carcasses; the Fairfield Works (near Ashburton), with storage for 90,000 carcasses, and a daily capacity of 4,000 carcasses; and the Pareora Works (near Timaru), which have storage for 110,000 carcasses, and can deal with 4,500 in a day. The works have engines representing 1,050-horse power, and employ 846 men when in full work. The Islington and Timaru works, which are owned by the Christchurch Meat Company, employ in all about 700 men, and have engines representing 1,450-horse power. The former can put through 6,000 carcasses per diem, and have storage for 120,000 carcasses. The latter can deal with 5,000 carcasses in a day, and have storage for 100,000 carcasses.

Wool.

During the year ended 31st March, 1911, there were shipped at Lyttelton and Timaru 39,722,136 lb. wool, valued at £1,750,167; and to this must be added the amount bought for manufacture by the woollen-mills in the district. The Kaiapoi Woollen Manufacturing Company (Limited) owns large woollen-mills at Kaiapoi, and clothing-factories at Christchurch. These are fitted with modern machinery and appliances, and the company's products have obtained a considerable reputation. The company employs about 900 hands, and uses about 1,176,000 lb. of wool and 5,000 pounds' worth of other New Zealand products in a year. The staple of the New Zealand wool, especially the long-wool and crossbred, is remarkable for its freedom from breaks and other imperfections. The average clips are approximately as follows: Merino, 4 lb. to 7 lb.; quarter-breds, 6½ lb.; half-breds, 7½ lb.; three-quarters, 8½ lb.; Leicesters, 10½ lb.; Lincoln, 11 lb. From special flock clips up to 25 lb. and 30 lb. are obtained.

Butter and Cheese.

Banks Peninsula and the rich tracts of country previously mentioned are excellently suited for dairy-farming. The pasture and climatic conditions are favourable, and a great increase in the production of butter and cheese may be looked for, more especially as housing and hand-feeding are in some districts unnecessary. A central co-operative dairy-factory has been esta-

blished at Addington, served by twelve creameries, situate at Marshland, Oxford, Halswell, Springston, Doyleston, Little River, Ladbrooks, Lakeside, Kaiapoi, Green Park, Brookside, and Ashburton, each capable of dealing with the milk of 1,000 cows. There are also very complete dairy-factories at Tai Tapu, Sefton, Cheviot, Timaru, Temuka, Southbrook, Belfast, Tinwald, and Le Bon's Bay, as well as cheese-factories at Flemington and German Bay. The number of cheese and butter factories in the district in 1911 was 19, and of creameries 36; the output of butter and cheese amounted to 5,414,160 lb.

Timber.

The sawmilling industry finds its development chiefly in the Oxford, Little River, Mount Somers, and Waimate districts. The number of mills in Canterbury in 1906 was eighteen, employing 266 hands, the horse-power being 393. The output is, however, diminishing owing to the working-out of the available timber. The timber comprises birch, totara, red and white pine. The first-named is used chiefly for sleepers and fencing, the totara and pine for building purposes. Including the work done by the planing and moulding mills the value of all the manufactures under this head was £29,912.

Fruit.

The district is eminently adapted for the growth of a large variety of fruits, especially all that flourish in Great Britain. Attention has recently been directed to landing supplies of fruit in London; the attempts so far have proved satisfactory, and point to the possibility of a large trade being established.

Coal.

Brown coal is found at the Malvern Hills, Homebush, Whitecliffs, Springfield, Mount Somers, Albury, and various other places. Lignite is also commonly distributed. For the year 1910, the output from 11 collieries, employing about 85 hands, was 23,708 tons, bringing the total amount raised from 26 collieries up to the 31st December, 1910, to 621,465 tons. The seams worked vary from 16 ft. to 2 ft. 3 in., the average width being 8 ft. At Acheron, near Lake Coleridge, a true anthracite is found, the other pits in the district being of brown coal or lignite.

Building-stones.

The building-stones of Canterbury comprise some excellent varieties. The Halswell quarries produce an exceedingly hard and close-grained stone of a dull leaden-grey colour. Granular trachytes are obtained from Governor's Bay, Lyttelton; porphyrites at Malvern Hills; good limestone at Malvern Hills, Waikari, Mount Somers, and various other places; bluestone rock is found at Timaru suitable for millstones. There is abundance of limestone in North Canterbury, Mount Somers, Castle Hill, and various other parts, which is well adapted for making lime.

Fisheries.

Deep-sea fishing is carried on from Lyttelton and Akaroa, the kinds of fish chiefly caught being groper (hapuku), ling, conger-eels, moki, butterfish, barracouta, soles, whiting, red-cod, herrings, and garfish. From Lake Ellesmere and the river estuaries excellent flounders are obtained.

Trout thrive amazingly in the rivers and fresh-water lakes, affording excellent sport.

Manufactories.

Excluding mines and quarries, the total number of manufactories in Canterbury at the date of the census in 1906 was 695, employing 7,516 males and 2,403 females.

Included in the above were 37 printing, 9 agricultural-implement, 26 coach building and painting, 27 fellmongering, tanning, currying, and wool-scouring

establishments, 7 sail and oilskin factories, 15 boot and shoe factories, 2 rope and twine works, 8 flax-mills, 6 boiling-down, meat-preserving, and freezing works, 11 bacon-curing works, 16 cheese and butter factories, 22 grain-mills, 33 chaff-cutting and grass-seed-dressing works, 13 breweries, 8 malt-houses, 28 aerated waters and cordial works, 4 sauce and pickle making factories, 4 soap and candle works, 18 sawmills and sash and door factories, 4 gas-works, 22 brick, tile, and pottery manufactories, 13 iron and brass foundries, 41 cycle-works, 27 furniture-factories, and 6 engineering-works.

The census returns also showed that in 1905 the value of land, machinery, and buildings used for factory purposes was £2,200,902, and the total value of manufactures £5,088,329.

Educational Institutions.

Primary Schools.—The district is divided into two parts, termed North and South Canterbury, each presided over by an Educational Board. Under the control of the Boards schools have been established throughout the whole country wherever population warranted their erection.

The number of children attending the public primary schools in Canterbury on 31st March, 1911, was 26,601. Average daily attendance, 24,229. Number of teachers—males, 274; females, 508: total, 782. Number of schools, 296.

There is a Normal School at Christchurch for the training of teachers.

Secondary Education.—For the further education of children ample provision has been made by the establishment of secondary schools. The principal schools of this class are the Boys' and Girls' High Schools at Christchurch, Rangiora, Ashburton, and Timaru. For more advanced students Canterbury College, Christchurch, is available. This institution was founded and endowed by the Provincial Government in 1873, and is presided over by a Board of Governors. The teaching staff comprises fifteen professors and lecturers, and the number of students attending lectures is 400. The School of Engineering, Electricity, and Technical Science, recently established as a special branch of the college, is well equipped, and is attended by a large number of students. The School of Art is also a special branch of the college work, and the popularity of both these branches has been met by the recent erection of considerable additions to the building accommodation.

It should be recorded here that the Provincial Government of Canterbury was fully alive to its duties as regards higher education. It made reserves for the purpose of endowment for the following objects: (1) College, 101,640 acres, reserved June, 1873; (2) technical science, 103,000 acres, reserved July, 1873; (3) School of Agriculture, 100,950 acres, reserved June, 1873; (4) Boys' High School, 9,220 acres, reserved at various dates; (5) Classical School, 8,953 acres, reserved at various dates. To these were subsequently added the following: (6) Girls' High School, 2,578 acres, reserved January, 1878; (7) Medical School, 5,000 acres, reserved December, 1877.

Technical education is provided for by the schools of engineering and art in connection with Canterbury College, a technical and continuation school under the control of a local Board of Management subsidized by the Government and local bodies, and a school of domestic instruction, also controlled by a local Board of Management.

Private Schools.—There are numerous private schools, independent of the State, the chief amongst them being Christ's College, Christchurch, connected with the Church of England. The Roman Catholics support schools of their own in Christchurch, Pleasant Point, Lyttelton, Timaru, Addington, Papanui, Ashburton, Akaroa, Rangiora, Sheffield, Temuka, Leeston, and Waimate. There are besides, in Christchurch, some excellent private boarding and day schools for both boys and girls, and two good commercial training schools.

Other Institutions.

Canterbury has the advantage of possessing many flourishing public institutions. The School of Arts, Christchurch, was established by the

College Governors in 1882; the Art Gallery owes its origin to the Art Society, the site being the gift of the Government. The Canterbury Agricultural College is situated at Lincoln, fourteen miles from Christchurch, and the College buildings, which are commodious and substantially built, cost over £20,000, and provide accommodation for the Director and teaching staff and fifty-one students. The fees are on a very low scale. There is attached to the College a farm of 780 acres of heavy and medium land, and in addition to this there are about 1,500 acres of light land owned and worked by the College, about seven miles away. The farm-buildings at the College are complete, and include well-equipped workshops. Instruction is given in every branch of farming and in the allied sciences—chemistry and physics, botany and zoology, mechanics and surveying, as well as a complete course in veterinary science. The lecturer in veterinary science is resident, and students are enabled to gain practical experience in the treatment of diseases of stock, both by visiting with the veterinary surgeon stock belonging to the neighbouring farmers, and also in cases brought to and treated at the College. The lecturer on biology has charge of the experimental plots of cereal and forage plants, by means of which students are enabled to become acquainted with all the varieties of plants usually grown on farms, and a certain amount of experimental work is done towards securing improved strains of cereals.

The Public Library, Christchurch, under the control of the College Governors, contains reading-rooms, a circulating library of some 25,000 books, and a reference library of about 19,000 volumes. Two hundred and six magazines and newspapers are provided. The number of subscribers is 1,160, and the average daily attendance over 1,000. There is also a spacious free reading-room, 60 ft. by 36 ft., which is supplied with 156 English, American, and colonial newspapers and periodicals.

The Museum, Christchurch, is a handsome pile of stone buildings; the collections are large and varied. They are separated into two groups: (1) Those from New Zealand; (2) those from foreign countries. In the New Zealand department the skeletons of whales and moas, as well as the collections of shells (tertiary and fossils) and rocks, are specially good; and the Maori collection, exhibited in a Maori house, is also of considerable interest. In the foreign department, the geological, mineralogical, and ethnological collections are the most extensive, but there is also a good illustrative series of Egyptian and Roman antiquities, as well as of the remains of prehistoric man in Europe and America.

This institution owes its origin and success to the foresight, skill, and energy of the late Sir Julius von Haast, and to the munificence of the Provincial Government.

The philanthropic institutions embrace the Christchurch, Akaroa, Ashburton, Timaru, and Waimate Hospitals; the Sunnyside Mental Hospital; the Rhodes Convalescent Home; the Memorial Home for the Aged at Wools-ton; the Tuarangi Old Men's Home at Ashburton; the Deaf-and-Dumb Asylum at Sumner; the Orphanage, Sydenham; the Industrial School at Burnham; and the Mount Magdala Asylum, Samaritan Home, and St. Saviour's Children's Home, in the vicinity of Christchurch.

Towns.

Christchurch, the capital city of the Canterbury District, is situated on the plains. It is practically level, the original portion of the city being laid out in rectangular form, two miles by one mile and a quarter, and intersected diagonally by a street. All the principal streets are 66 ft. in width. There are numerous open spaces, including the Cathedral Square in the centre, and Cranmer and Latimer Squares. The Avon, a pretty stream, overhung by willows, runs through the town, presenting from all points charming vistas. The city is surprisingly English in its appearance, architecture, and surroundings. The central portion, where stands the Cathedral, Government offices, and other substantial structures, has a handsome, well-built look. Other parts contain fine public buildings, such as the Museum, Canterbury College,

High Schools, &c. The whole is admirably set off by Hagley Park, 400 acres in extent, the Domain and Botanical Gardens, 79 acres, Lancaster Park, the Town Belts, and other public and private gardens and plantations. The suburbs can show many handsome houses and beautifully kept grounds.

On the 1st April, 1903, the suburbs of Sydenham, Linwood, and St. Albans were amalgamated with the original city proper into what is known as "Greater Christchurch," comprising a total population of 53,116. Including the adjacent Boroughs of Woolston, New Brighton, and Sumner, and other suburban areas, the total population now amounts to 80,193. Tramways connect the centre of the city with the outlying areas of Addington, Sydenham, the Port Hills, Opawa, Papanui, and Fendalton, and with the seaside boroughs of New Brighton and Sumner. The city has been drained at considerable expense, the sewage being conveyed three miles and discharged on the sand wastes near the sea. A pure and copious water-supply has been provided by nature, and is obtained by artesian wells. For the purposes of municipal government the city is divided into four wards, and its affairs are controlled by the City Council, presided over by the Mayor. Christchurch is the centre of trade and commerce for the North Canterbury agricultural and pastoral country, and the headquarters of many manufacturing industries, including carriage, boot and clothing factories, iron and brass foundries, agricultural-implement works, fellmongering, tanning, and wool-scouring works, flour-mills, breweries, meat preserving and freezing, biscuit, planing and moulding, bicycle, brick and pottery, soap and candle, and other works.

There are large and well-equipped agricultural and pastoral show-grounds at Addington, where a fine and successful show is held every year.

Recreation and amusement are provided for by His Majesty's Theatre, Theatre Royal, Opera House, and various public halls, the famous Riccarton racecourse, the numerous cricket and football grounds, &c., while boating men have the River Avon and the Heathcote estuary.

Christchurch is connected with the outside world by Port Lyttelton, seven miles distant. The railway-tunnel of 1½ miles in length, through the Port Hills, is on this line. Christchurch is not only the centre of the splendid Canterbury Plains, but is also one of the chief railway centres. Addington railway-workshops are extensive and fully equipped.

Lyttelton, the chief port of the district, is situated on the northern shores of the inlet of that name, sometimes called Port Cooper. The surrounding country consists of high precipitous hills, which separate the harbour from Christchurch and the plains; but by the construction of the railway and tunnel the natural difficulties have been overcome, with the result that the whole of the imports and exports of northern and central Canterbury pass through Lyttelton. The origination and accomplishment of this great engineering work is due to the late William Sefton Moorhouse, at that time Superintendent of the Province. The natural advantages of the port have been enhanced by reclamation and harbour-works, which includes two breakwaters, 2,010 ft. and 1,400 ft. in length respectively, extending from Officer and Naval Points, enclosing about 107 acres; long lengths of wharf-accommodation, 10,041 ft.; a patent slip for ships up to 400 tons; and a splendid graving-dock 450 ft. long, width on top and bottom 82 ft. and 46 ft. respectively, the entrance being 62 ft. wide, well equipped with machinery and all requisites for repairs. Ships drawing up to 25 ft. can berth alongside the spacious wharves and sheds. The railway, electric light, machinery, and appliances are available throughout, which renders loading and unloading practicable both by day and by night. As an indication of the volume of trade dealt with at the port, it may be noted that for the year ended 31st March, 1911, the imports were valued at £2,836,643, and the exports at £3,081,892. The town is built on the side of the range, the streets being generally steep, flanked by solid stone buildings; and a background of green spurs and bold rocky faces gives completeness to the whole appearance. The water-supply is obtained from artesian wells on the Christchurch side of the hills. To Christchurch there is a bridle-track over the range, and a carriage-

road *via* Sumner. The harbour is well defended by fortifications and batteries on Ripa Island and the mainland. The population is 4,058.

Timaru is situated on the coast and railway-line between Christchurch (100 miles) and Dunedin (131 miles). It has a well-constructed artificial harbour, and port of shipment for the agricultural and pastoral districts of Geraldine, Temuka, and Waimate. The harbour is enclosed by a breakwater built of blocks of concrete; a rubble wall—the North Mole—starts from the shore a quarter of a mile away to the north, and extends easterly to a point 350 ft. from the breakwater. The enclosed space is 50 acres. During the year ended 31st March, 1911, the value of goods imported here was £302,738, and of produce exported £1,240,516. The town is situated on rolling hills overlooking the sea. The streets are irregular, but the public and commercial buildings, churches, and private houses are generally well and handsomely built of stone. The chief industries are meat-freezing, sawmilling, flour-milling, &c. The town has a good high-pressure water-supply, and is connected by well-made roads with the surrounding districts, and by rail with Fairlie, the route to the Mackenzie Country and Mount Cook. The population is 11,280 persons.

Of other towns in Canterbury the following deserve mention; Rangiora, population 1,834 persons, twenty miles from Christchurch by northern line of railway, is situated in the centre of a fine farming country, and possesses manufactories, including flax-mills, flour-mills, and brewery. The town and neighbourhood are much benefited by plantations.

Kaiapoi, on the Waimakariri, population 1,823, about fourteen miles from Christchurch by the northern railway-line, lies in a rich farming country, rendered pleasing and attractive by the extent and variety of plantations and gardens. There are factories and various industries, including ham and bacon curing, sawmills, brewery, and agricultural-implement works. Here also is the famed Kaiapoi woollen-mill, which employs 600 hands when trade is brisk. The Waimakariri is navigable for small vessels to the centre of the town.

Ashburton, the newest of the towns, has a population of 2,671, and is fifty-three miles from Christchurch on the southern trunk line. It is a well-built town, with extensive and beautiful recreation-grounds and gardens. It owes its existence to the settlement of the plains, the surrounding country being well adapted for farming. There are meat-freezing works, a cordial-factory, flour-mills, gasworks, ironworks, woollen-mills, brickworks, &c.

Geraldine, population 945, is situated on the Waihi River, four miles from Orari Railway-station, about eighty-six miles south-west from Christchurch. It is a neat and pretty town, in a first-class farming district, and has a beautiful park of native forest-trees.

Temuka, eighty-nine miles from Christchurch, on the southern railway-line, is a well-built town, with good agricultural land all round. It possesses flour-mills, a butter and cheese factory, brewery, foundry, and fellmongery. There is a beautiful park and domain. The population of the borough is 1,741 persons.

Waimate, population 1,762, is situated on the Waihao Forks Railway, about four miles from Studholme Junction, over a hundred miles from both Christchurch and Dunedin. This town is the centre of an extensive back-country, and a splendid agricultural area. It owes its origin to the sawmill industry of the Waimate bush. Industries: Sawmilling, flour-milling, &c.

Akaroa, population 622, situated on the noble harbour of that name, was founded in 1840, in the first instance by the French. It is a quiet, picturesque little place, much patronized by Christchurch residents and others as a summer resort and watering-place. It was here that Captain Stanley hoisted the British flag on 11th August, 1840, when he took possession of the South Island on behalf of the Crown, forestalling the French by a few hours only. A suitable obelisk commemorating this event has been erected on the spot.

THE OTAGO LAND DISTRICT.

ERNEST HERBERT WILMOT, Commissioner of Crown Lands.

Boundaries and Area.

The Otago Land District lies between the 44th and 47th parallels of south latitude, and extends from 167° 20' to 171° 10' of east longitude. It is bounded on the north by the Canterbury Land District; on the south-east and south by the ocean; on the west and south by the Waikawa, Mokoreta, Slope-down, Waikaka, Chatton, Wendon, Waikaia, Gap, Rockside, and Kingston Survey Districts, the western and southern shores of Lake Wakatipu, to opposite Round Peaks; thence by southern watershed of the Greenstone, Hollyford, and John o' Groats Rivers to the ocean at Stripe Point; and on the north-west by the ocean to Big Bay.

The district measures about 160 miles from Stripe Point on the west coast to Waikouaiti Bay on the east coast, and the same distance from north to south. Its area is 8,882,800 acres.

Physical Description.

The country generally is mountainous, the highest land being to the north-west, and culminating in Mount Aspiring, 9,960 ft. above the level of the sea.

The west coast mountains are remarkably rugged and grand. The thirteen sounds that pierce this coast are on the west coast of the Southland District. Milford Sound, though only eight miles in length, contains some of the grandest scenery in the world; and fourteen miles inland from its head is the great Sutherland Waterfall, 1,904 ft. high, possibly the highest waterfall known. Bligh Sound is smaller than Milford, and not nearly so interesting; but George Sound is larger.

A tourist track has been opened from the head of Te Anau Lake to Milford Sound. The Government Tourist Department has now assumed complete control of this track, and has established a comfortable accommodation-house at the head of Te Anau, where guides can be procured if required from the 1st November to the 30th April. There are six huts on the track, supplied with blankets, provisions, &c., and a man and woman in charge of each hut. The track runs through the Clinton Valley, passes the Sutherland Falls and Lake Ada, and opens out some of the finest scenery in the Dominion. A practicable route has also been discovered, and a track formed, from the north-west arm of the middle fiord of Te Anau Lake to the head of George Sound. During the season there is a fortnightly mail between Invercargill and Milford.

For nearly one hundred miles inland from the west coast the country is very mountainous, but at a distance of sixty or seventy miles from the south-east coast-line it begins to get gradually lower, taking the form of rolling hills and downs along the sea-shore.

Rivers and Lakes.

The largest rivers are the Clutha, Taieri, and Waitaki: the first named drains Lakes Wakatipu, Wanaka, and Hawea; the last, Lakes Ohau, Pukaki, and Tekapo, in the Canterbury District. Te Anau, the largest lake in the South Island, lies partly in the Otago and partly in the Southland District. The dimensions of these lakes are as follows:—

Lakes.	Length in Miles.	General Breadth in Miles.	Area in Square Miles.	Height above Sea-level in Feet.
Te Anau, in Southland	42	1 to 6	132	694
Manapouri, "	14	4	56	597
Wakatipu, in Otago ...	50	1 to 3½	112	1,016
Wanaka ...	29	1 to 3	75	920
Hawea ...	19	3	48	1,062
Ohau ...	11	1 to 3	23	1,720
Pukaki ...	11	2½ to 5	31	1,588
Tekapo ...	15	1 to 3½	32½	2,321

These lakes are situated in mountainous country; they are of glacial origin, and all very deep. A bathymetrical survey of Lake Wakatipu shows an almost level floor extending from near Queenstown to near Kingston at a depth of over 1,200 ft.

The steamer service on Lake Wakatipu is owned by the Government, and is under the control of the Railway Department. During the summer months the steamers run between Kingston and Queenstown daily, and to the head of the lake from Queenstown three times a week. During the winter months the daily service to Kingston is maintained, but the communication with the head of the lake is only bi-weekly.

Persons desirous of proceeding by direct tract from Lake Wakatipu to Glade House, Lake Te Anau, may go *via* either the Routeburn Valley or the Greenstone Gully route. The stages of the Routeburn Valley route are: Queenstown to Glenorchy, Head of Lake, thirty-five miles by steamer; thence to Routeburn hut, seventeen miles, trap and walk—time, about four hours; thence to Lake Howden camp, *via* Lake Harris, twelve miles walk—time, about eight hours—four miles to Lake Harris Saddle can be done on horseback—Lake Mackenzie is passed en route; thence to Murcottburn camp, 13½ miles walk—time, about eight hours—passing Lakes Lockie, Fergus, and Gunn; thence 9½ miles walk to Glade House—time, about seven hours, over Birley's Pass. The stages of the Greenstone Gully route are as follow: Queenstown to Elfin Bay, twenty-five miles by steamer; thence to Greenstone hut, a walk of eleven miles, occupying about five hours; thence to Lake Howden camp, a fifteen-mile walk of about seven hours; thence to Murcottburn camp, 13½ miles—time, seven hours; thence to Glade House, 9½ miles—time, about seven hours, over Birley's Pass. The track is open from 1st December to 30th April only.

On Lakes Wanaka, Manapouri, and Te Anau smaller steamers or oil-launches are in use.

The Clutha River is the largest in New Zealand, and is estimated to discharge over 1,000,000 cubic feet per minute. It has a rapid current, but is navigable for small steamers for a distance of forty miles from its mouth. At present there is a stern-wheel steamer plying on the River, and another is about to be constructed. The Waitaki is not a navigable river. For some seventeen miles from its mouth the Taieri River is affected by tides, which run up one branch into Waiholo Lake, and up the other branch as far as Allanton (Greytown).

A small privately owned steamer runs from Henley to the mouth of the Taieri River. There is also a house-boat in connection with the steamer. The scenery down the Taieri River is exceptionally fine, and the numerous excursions are well patronized by those in search of a day's outing. The distance from Henley to Taieri Mouth is about six miles.

Plains.

There are some considerable areas of tolerably level land in the interior, the largest being the Maniototo Plains, the Idaburn, Manuherikia, and Upper Clutha Valleys. Their dimensions are approximately as follows: Maniototo Plains, length twenty-four miles, average breadth, ten miles; Idaburn Valley, twenty-five miles by four miles; Manuherikia Valley, thirty-five miles by four miles; Upper Clutha Valley, thirty-three miles by five miles.

The Taieri Plain, nearer the coast, is about the same size as the Idaburn Valley, and is very fertile. Other plains are the Waitaki in the north, the Tokomairiro, the Strath-Taieri, the Tapanui, and the fertile Inch-Clutha, lying between the two branches of the Clutha River, and consisting entirely of alluvial deposit. There is also a good deal of low country, chiefly rolling downs, on the south-west side of the Clutha near the sea.

Forests.

The forest land lies mostly along the sea-coast, the largest area of bush being Tautuku Forest, about forty miles in length and fifteen miles in

breadth. The western part of this forest is in the Southland District. The other principal forest areas are in the following localities—viz., at the heads of Lakes Wakatipu, Hawea, and Wanaka; the Hollyford Valley; west of the Tapanui Mountains, in the upper valley of the Waikaia River, and towards the north-west coast.

The forests of Otago contain a large variety of useful timber, both hard and soft wood; some being suitable for building purposes, while other varieties are highly ornamental, and much prized for cabinet-work.

Building-stones.

Building-stones of good quality are found in various places throughout Otago. The Port Chalmers quarries afford an inexhaustible supply of bluestone, a volcanic conglomerate stone of fair hardness and durability; and the neighbourhood of Hindon furnishes a bluestone of superior quality. A very good basalt is also to be found on the Horseshoe Bush Estate, about thirty miles south from Dunedin and one mile from Clarendon Station. In Otago central a hard, close sandstone is obtained near Kokonga, also a black basalt, of which the new Dunedin Railway-station is built. Two very fine building-stones—a limestone and a freestone—are found at Bob's Cove, Lake Wakatipu. A hard freestone of excellent quality is found at Waikawa, where there is a large hill of it close to the water's edge. Blocks of very great size can be obtained. The same stone occurs at various points along the Catlin's Railway, which is being ballasted with the same, after crushing. The foundation-stone of the Balclutha Post-office was obtained in this locality. There is also a freestone of superior quality on land at the Peninsula, but the inaccessibility to the stone would make it difficult to quarry. A dense dark granite of first-class quality is obtainable on Ruapuke Island; specimens, both tooled and polished, may be seen in the base and pilasters of the Government Life Insurance Buildings at Dunedin. A somewhat similar stone is also obtainable at the Ocean Beach, near the Bluff. A soft white building-stone—the well-known Oamaru limestone—is found in large quantities along the railway-line near Oamaru, from whence a good deal is exported to other parts of New Zealand and to the Australian States. A similar kind of stone is found at Otekaieke, about two miles from the rail-station, and it may be interesting to note that during the years 1891–93 about 3,000 tons of stone were sent from the Otekaieke quarries to form the facings of the Melbourne Fish-market. These quarries are not now worked.

Limestone for Burning.

Limestone is found in the following places: Oamaru, Otekaieke, Otepopo, Makareao, Waihemo, Waikouaiti, Lower Harbour, Peninsula, Waiholo, Millburn, and Wakatipu.

The Millburn Lime and Cement Company burn large quantities of lime at their Millburn works, whence it is sent to all parts of Otago, for building purposes, gasworks, &c. It is also largely used in farming, and the productivity of the Tokomaririro Plain has been greatly increased of late years by its application to the soil. Large cement-works belonging to the same company have been open for some years on the reclaimed land in Otago Harbour, near Dunedin. At Burnside this company has large cement-works, the raw material being obtained from the Oamaru limestones and from marlbeds between Cattle-yards and Burnside. The cement manufactured at both these works is considered fully equal, if not superior, to the best imported, and is largely used in building and other constructive works.

The Government lime-kilns at Makareao, near Dunback, have been leased for ten years from 1st September, 1907, the present lessee being the Millburn Lime and Cement Company, which has just installed a fine plant on the Schemabolla principle, which will greatly increase the output. The lime produced is of good quality. A branch railway to the kilns connects with the Government line at Inch Valley.

Coal and Lignite.

In the southern portion of Otago and in part of Southland thin seams of coal of a bituminous character exist. Probably the coal produced from the pits at Kaitangata, Shag Point, and Nightcaps is the best in quality. First-class brown coals are worked in several parts of Otago, the principal seats of the industry being Green Island, Milton, Alexandra, and Bannockburn, as well as other parts of Central Otago.

Beds of lignite are also found in numerous localities, chiefly around the margins of the old lake-basins and along the courses of the older river-valleys, and are worked on a sufficient scale to supply local requirements.

The output of coal and lignite in Otago and Southland for year ending 31st December, 1910, was 431,958 tons.

Climate.

The climate of Otago is on the whole fairly equable. Central Otago suffers a little from the intensity of the cold in the winter and the excess of heat in summer; but places on the sea-coast have a fairly even temperature all the year round. There is a somewhat large area of practically rainless territory, which includes the Maniototo Plains, the Idaburn and Manuherikia Valleys, and extends to Lakes Wakatipu, Wanaka, Hawea, and Ohau on the west and north, and to the northern portion of Waitaki County on the north-east. From Oamaru the direction would be across country to Mount Benger and to the southern end of Lake Wakatipu. This part of the country is well adapted for sheep of all kinds, especially merinos, some of the runs being capable of carrying 80,000 sheep. Wonderful results have been worked with irrigation on parts of the hitherto dry and barren portions of Central Otago. So far irrigation has been tried only on a small scale, but the Government has under consideration a scheme for converting the Upper Taieri Plain or Serpentine Valley into a reservoir for irrigation purposes, which will cover an area of about eighteen square miles, with a depth of fifty feet, and will command 90,000 acres of land for irrigation.

West Coast.

In marked contrast to Central Otago is the West Coast District which may be described as having a wet climate. Not that the number of wet days in the year is great, but it is subject to very heavy rains from the north-west, the fall generally exceeding 100 in. per annum. But, although wet, the climate is mild, and the vegetation is consequently luxuriant. Mr. and Mrs. Sutherland keep a house of accommodation for tourists at the head of Milford Sound. There are very few visitors to the Sounds during winter, but in summer the tourist traffic is considerable. Towards the south-east and south coasts of the district the climate is moist, being somewhat similar to that of Dunedin, where the average rainfall is 38 in., distributed over 180 days in the year.

Freezing Establishments.

There are three freezing and preserving works in Otago. The establishments are at Oamaru, Burnside, and Port Chalmers.—At Oamaru there is a 60-ton Hercules refrigerator, capable of freezing 1,000 sheep a day, and there is a storage-room for 30,000 carcasses. The Port Chalmers freezing-works, erected in 1896 by the Otago Dock Trust, are largely used for the storage of butter prior to shipment, and for the freezing of rabbits during the season when these are available for export. The refrigerating machinery originally consisted of a 12-ton Hercules, but lately the buildings were enlarged, and a 35-ton Hercules was added. At Burnside there is a 75-ton Hercules machine, capable of freezing 1,500 sheep per day, and there is a storage room for 60,000 carcasses. In addition to the usual export in mutton and lamb, much export business is done at these works in frozen rabbits. Another 75-ton Hercules machine has been installed at Burnside this season, which doubles the freezing-capacity of these works, and the storage-capacity has also been increased by the erection of a large brick store, replacing a

wooden one (removed). With the additional storage provided, there is now storage-room for 75,000 carcasses of mutton or 90,000 lambs. The export of rabbit-skins from Dunedin during the financial year ended 31st March, 1911, amounted to 8,079,708 skins, valued at £117,004.

Gold-production.

Gold is found very generally distributed throughout Otago, except in the southern portion of the district. The principal localities are: Clutha Valley, Tuapeka, Shotover, Cardrona, Tinker's, St. Bathans, Mount Ida and Nevis, Bannockburn, and Maerewhenua. Last financial year 83,758 ounces of gold were exported from Dunedin, having a value of £338,661.

Chief Towns.

The following are the chief towns of Otago, with their population, in April, 1911, including all having 1,000 inhabitants and upwards: Dunedin and suburbs, 64,237; Oamaru, 5,152; Port Chalmers, 2,100; Mosgiel, 1,596; Milton, 1,347; Kaitangata, 1,567; Balclutha, 1,261.

City of Dunedin.

Dunedin, the capital city and commercial centre of Otago, is situated at the head of Otago Harbour, and is distant eight miles—about half an hour's journey by rail—from its seaport, Port Chalmers. Otago Harbour has been greatly deepened by dredging during the past decade, and ocean liners are now berthed alongside the Dunedin wharves.

The city proper is about two miles and a half long by a mile broad, and is dotted here and there with handsome public buildings and large warehouses which compare favourably both in size and architecture with those in other centres of New Zealand. Among buildings of note may be mentioned the Law Courts, Knox Church, St. Joseph's Cathedral, Boys' High School, Girls' High School, First Church, Town Hall, Otago University, and Railway-station. The Cargill Monument, which was erected to the memory of the late Captain Cargill, the founder of the Otago Settlement, stands in the Triangle, between the Customhouse and the Bank of New Zealand. It is an ornate specimen of early decorated Gothic. The city has been much beautified with numerous parks and reserves artistically laid out by the Dunedin and Suburban Reserves Conservation Society, who have taken in hand with praiseworthy energy the task of planting with trees and flowers hitherto neglected areas of waste lands. The Octagon, Jubilee Park, and Victoria Gardens (formerly known as the Triangle) are standing monuments to the society's work. The Government has also acquired and set aside as scenic reserves several areas containing good native bush.

The private residences of Dunedin are largely situated on the hills sloping upwards from the harbour, and cable tramways connect the city proper with the hill suburbs. A reserve of native bush fringes the hills round about, and is traversed by a fine carriage-road, named the "Queen's Drive," from which views of the harbour and city can be obtained. This reserve—known as the Town Belt—was set apart in the early days of Otago settlement.

The city has an electric-tram service, which has been extended to the favourite seaside resorts of St. Kilda and St. Clair, each within three miles of the Chief Post-office. There is a stretch of two miles of fine, open, sandy beach between St. Clair and Lawyer's Head, affording unrivalled facilities for surf-bathing, in which both sexes indulge in large numbers during the summer season. At the northern end of the city—about two miles from the Chief Post-office—the electric cars run down to the Botanical Gardens, which are tastefully and artistically laid out with many beautiful flowers and shrubs. A band rotunda has been erected here, and on Sunday afternoons sacred concerts are given throughout the summer months. A winter garden has been added to the attractions—a gift from a citizen.

The Woodhaugh Valley, the reservoir, and the Leith Valley with its waterfalls, are also within easy distance of the town, and from a scenic point of view possess many features of interest.

Dunedin is well supplied with elementary schools, there being in March, 1911, six large schools in the city proper, with an attendance of 2,970 pupils, and twelve more in the suburbs, with 4,657 pupils.

There is also in Dunedin a training college for teachers. The students in training number 100.

The School of Art and Design is situated in Moray Place, close to George Street, and has a staff of eight teachers. In 1910 there were 643 students in attendance.

The Dunedin Technical School, situated in Moray Place, is under an associated Board of Management composed of representatives elected by the Otago Education Board, the Dunedin City Council, and the subscribers to the Technical Classes Association.

The objects of the school are : (1.) To provide day-courses of instruction at which scholars on completing the primary-school course will receive instruction suited to the trade or occupation they purpose following. (2.) To organize a scheme of evening classes (a) that will enable young people engaged during the day to continue their education and receive a higher education, so that they may in time, if inclined, take advantage of the higher instruction available at the University of Otago ; (b) that will offer in various trades and occupations such instruction both in theory and practice as will increase the efficiency and ability of the workman.

The day-work comprises technical, trade, commercial, and domestic courses attended by 190 students, taught by twelve permanent teachers and two part-time workshop instructors.

The evening classes make provision for tuition in English, Latin, elocution, elementary and practical mathematics, typewriting, shorthand, commercial penmanship and correspondence, commercial law, book-keeping, physics, electrical science, chemistry, painters' work (three branches), plumbing, pattern-making, mechanical drawing and machine construction, mechanical engineering, carpentry, cabinetmaking, blacksmithing, coach-building, wood-carving, dressmaking, needlework, cookery and domestic economy, physiology, and horticulture.

A total of 865 individual students enrolled for these evening classes, and thirty-three teachers otherwise engaged during the day were employed specially for the work.

Subject to compliance with the regulations the classes are free to holders of proficiency certificates (N.Z.)

The fees to paying students are 10s. per term for a class or £1 1s. for a course.

The £4,200 income for the year was made up as follows : Fees, £632 ; voluntary contributions, £332 ; and Government capitation, grants, and subsidy, £3,236.

The Otago Boys' High School stands on a commanding plateau 300 ft. above the business part of the city and the harbour. The school was opened on the 3rd August, 1863, in the building in Dowling Street now occupied as the Girls' High School. The new buildings in Arthur Street were opened by the late Sir William Jervois, Governor, in February, 1885. The teaching staff, including the Rector, numbers thirteen ; the total enrolment is 343.

The Otago Girls' High School was opened on the 6th February, 1871, with a roll of seventy-eight pupils. The present attendance is 213, with a teaching staff of eleven, exclusive of visiting teachers. Otago holds the proud distinction of having established the first Girls' High School in Australasia. Among the earnest band of workers who laboured to establish this first High School for girls the name of Miss Dalrymple stands pre-eminent, and will ever be held in grateful remembrance by the people of Otago. The main portion of the new Girls' High School building, erected at a cost of a little over £9,000, was completed towards the end of 1910, and occupied by the pupils during the third term of the year.

At the commencement of the year 1903 the Board of Governors accepted the Government's offer in connection with providing free secondary education by admitting sixty-three boys and fifty-one girls who passed the Sixth Standard in the primary schools and were under fourteen years of age on 31st December, 1902, on payment by the Government at the rate of £8 per annum per head.

There are now 315 boys and 210 girls in attendance at the schools under the new Government regulations.

A swimming-bath has been erected at the Boys' High School 75 ft. by 30 ft., 6 ft. deep at one end and 3 ft. 6 in. at the other, covered with iron roof with skylights, and furnished with dressing-rooms. This bath is available for both schools, and is a valuable adjunct.

The University of Otago was founded in 1869, and opened in 1871. It is well housed in a pile of handsome buildings after the domestic Gothic style. There are six separate faculties in the University—viz., arts and science, medicine, mining, law, dentistry, and Home science. The teaching staff comprises thirty-seven professors and lecturers.

The School of Medicine provides the full course for the medical degrees of the University of New Zealand. There is a medical museum in the University buildings containing anatomical, pathological, and other preparations and models.

The School of Mines occupies a separate building. It possesses a metallurgical testing plant, well-equipped mining, geological, and metallurgical laboratories. The curriculum provides for the course prescribed for the B.E. degrees in mining and metallurgy of the University of New Zealand, and for the Associate diplomas in mining and metallurgy of the University of Otago.

A new building for the School of Mines was erected in 1909. It is a handsome structure, and contains quite up-to-date appliances for the teaching of mining, surveying, metallurgy, geology, and applied mechanics. The building also contains a museum, with a complete collection of New Zealand geological specimens.

A School of Dentistry has been established, and is now open. Instruction is given qualifying for the degree in dentistry of the University of New Zealand.

A special course in Home science and domestic arts has this year, for the first time, been provided for women students.

A three-years course of lectures and practical work leads to the degree of B.Sc.

Students well attend some of the science lectures provided in other departments of the University, notably in chemistry, physics, biology, and physiology, but special courses in the application of science to the domestic arts, on household economics, and the development of the child, together with full courses of practical work in the domestic arts, and experimental work in the special laboratory, which has been provided for the purpose, are giving to the women of New Zealand opportunities similar to those enjoyed by their sisters in England and America. A diploma will also be granted by Otago University to students who have duly qualified in certain parts of the subject.

The undergraduates keeping terms, according to the latest available information, are 313 men and 127 women. The University library contains over 5,000 specially selected volumes, and is open to the public under certain conditions for purposes of reference.

The Chemical and Physical laboratories are well fitted up, and furnished with all necessary instruments and appliances. There are at present in attendance forty-seven scholarship holders whose fees are paid either by the New Zealand University or by the Government, and, in addition, there are ten scholarships provided by the University Council, the values of which range from £10 to £50 per annum.

The College will probably shortly commence building the new School of Veterinary Science, as the Government has voted a sum of money towards its erection.

The public Museum is under the control of the University Council. It is situated in Great King Street, about five minutes' walk from the University. It includes a well-equipped Biological laboratory and houses the library of the Otago Institute. In 1909 "The Hocken Wing" was erected by public subscription, aided by an equal sum from the Government, to house the magnificent gift of a private citizen, the late Dr. T. M. Hocken, who presented to the people of New Zealand his library and Maori objects. "The Hocken Library" contains valuable records and papers relating to the early history of New Zealand. The works of art formerly displayed in the art gallery in the Museum building are now housed in a commodious building near the centre of the town, and adjoining the Early Settlers' Hall, in which may be found interesting momentos of the early days of the Otago Settlement.

The Dunedin Athenæum and Mechanics' Institute is centrally situated in the Octagon, and possesses a well-maintained library of about 24,000 volumes, and a membership of over 1,900 subscribers. The building, which was considerably enlarged a few years ago, contains, in addition to the circulating library, a reference library, a large reading-room with an excellent supply of magazines and newspapers from all parts of the world, a chess-players' room, and a smoking-room.

A free public library has been established in Moray Place West under the control of the City Council. Mr. Andrew Carnegie, of Scotland, donated the sum of £10,000 to the object, and another £4,000 has been spent on fittings, &c. The library (which was opened to the public on 2nd December, 1908) has a reading-room and magazine-room well stocked with daily papers from all parts of the world, and the latest and most up-to-date periodicals. Mr. W. B. McEwan is the first librarian. A reference library (which will contain 5,304 volumes), a juvenile reading-room (containing 1,704 books), and a lending-library for adults and juveniles, are now open. The total stock at 31st March, 1911, comprised 12,534 books.

Towns and Surrounding Country.

Port Chalmers (eight miles from Dunedin), situate on Otago Harbour, midway between the Heads and Dunedin, has a population of 2,100. It is the chief port of Otago, and possesses every accommodation for Home vessels, including dry dock, 80-ton sheer-legs, steam-hammer, and other appliances, besides several private foundries, cool-storage chamber, &c. The Port Chalmers graving-dock is described in the article on page 80.

Leaving Dunedin by the northern railway, winding in and out through the hills which surround the town and port, and skirting the precipitous cliffs of the coast-line, the first station of importance reached after Port Chalmers is Waitati, a favourite seaside resort in Blueskin Bay; distance, seventeen miles. Fifteen miles beyond is Waikouaiti—population, 688—pleasantly situated on the Hawksbury Lagoon, the centre of a flourishing farming country. The next place of note is Palmerston, forty-one miles from Dunedin, with 792 inhabitants. A branch line leaves Palmerston, and runs nine miles up Shag Valley to Dunback. Six miles further on the main line there is a branch to Shag Point, a coalfield, with two pits.

Oamaru (seventy-eight miles) is the second town in Otago, having a population of 5,152. It is the centre of a large farming district, and has a good harbour, formed by a concrete breakwater, for the reception of ocean-going ships. The chief exports are wool, grain, and frozen meat. This town is noted for its attractive public gardens and numerous recreation reserves. The Waitaki Boys' High School, founded in 1878, is a fine building of Oamaru stone, standing in spacious grounds, situate about two miles north of the town. The school is well equipped, and attracts scholars from all parts of the Dominion, and even from Australia. The staff comprises the rector and six assistants; and the number of scholars attending at the beginning of the year 1911 was 229, of whom 154 were boarders, the boarding-school being under the supervision of the rector. The Girls' High School is a splendid white stone building, situated about one mile from the centre of

the town. A branch line runs from the junction near Oamaru up the Waia-reka Valley to Ngapara, seventeen miles, and Tokarahi, twenty-five miles from Oamaru, and another seven miles by road leads to Livingstone.

Starting from Oamaru, and proceeding to Central Otago *via* the valley of the Waitaki River, the first part of the journey is accomplished by rail across the fertile Papakaio Plains to Awamoko (ninety-six miles), and thence following up the Waitaki River past Duntroon to Kurow (120 miles from Dunedin). At Kurow the traveller leaves the railway and follows the course of the Waitaki through pastoral country to Rugged Ridges Station (133 miles); a little beyond Rugged Ridges the road leaves the Waitaki River, and crossing the Ahuriri Pass (141 miles), strikes the Ahuriri River, which it follows up past Omarama Station (158 miles) to the junction of Longslip Creek; it then ascends this creek until Lindis Pass saddle is reached (172 miles), at a height of 3,185 ft. Here begins the descent to the Clutha Valley *via* Morven Hills Station (181 miles) and Tarras Station (200 miles). From Tarras Station the road runs through settled farming country up the Clutha River, which is crossed by means of a punt at Newcastle (219 miles), and four miles more brings the traveller to Pembroke, on the southern shore of Lake Wanaka.

From Dunedin the main trunk railway runs southward to Invercargill, a distance of 139 miles. Passing through the Caversham Ward and tunnel the traveller reaches Burnside (four miles) and Abbotsford (five miles), industrial centres, with coal-mining, tanning, iron-smelting, and other works. Four miles farther on is Wingatui, the junction of the Otago Central Railway; and ten miles from Dunedin is Mosgiel, a rising township with 1,596 inhabitants, noted for its woollen-mills. The railway-line now skirts the Taieri Plain, an alluvial flat eighteen miles long by five miles broad, the most fertile portion of Otago. A branch line nine miles long from Mosgiel Junction runs to Outram, on the farther side of the Taieri Plain. The main line continues on from Mosgiel, passing the smaller townships of Allanton (Greytown) and Henley, and Lakes Waihola and Waipori, strikes Milton (thirty-six miles), in the middle of the Tokomairiro Plain, a town of 1,347 inhabitants, with woollen-mill, flour-mill, dairy factories, flax-mill, pottery-works, and tannery. The next place of importance is Balclutha (fifty-three miles), on the banks of the Clutha River, with flax-mills and dairy factories; population 1,261. Kaitangata, situated lower down the Clutha River, and connected by a branch line four miles long, has extensive coalfields, and a population of 1,567. Leaving Balclutha, the main line runs through the Clutha downs, passing the small centres of Waitepeka, Warepa, Kaihiku, and Waiwera, and reaches Clinton (seventy-four miles), on the Waiwera Stream, a favourite resort of anglers. The next station of note beyond Clinton is Waipahi Junction (eighty-four miles), on the Waipahi River, likewise a favourite fishing-ground. Further on is Gore (100 miles), on the Mataura River, in the Southland District. Gore is a fast-rising borough of 3,258 inhabitants, with flour-mill, engineering-works, dairy factory, coal-mines, &c. Lower down the river is Mataura, also in the Southland District, a thriving borough of 1,199 inhabitants, where there are extensive freezing-works, paper-mills, implement-works, dairy factory, and fish-hatchery.

A branch line runs from a point on the main line near Gore to the Township of Waikaka, twelve miles distant, and serves a rich agricultural district which has been settled and cultivated for many years.

A branch line from Waipahi follows up and crosses the Pomahaka River and connects Tapanui (thirteen miles), Kelso (sixteen miles), Heriot (twenty miles), and Edievale (twenty-six miles).

The Otago Central Railway starts from Wingatui, crosses the Taieri Plain, and then winds round to the Taieri River, which it follows up to Waipiata, eighty-one miles from Dunedin, thence proceeds across the Maniototo Plain to the watersheds of the Taieri and Manuherikia Rivers, and through the Ida Valley to Omakau, Chatto Creek, and Alexandra to the present terminus, at Clyde. In its course along the river it runs for some distance through a rocky gorge, but after crossing the Sutton Stream enters Strath-Taieri—a comparatively flat, open country. Near Hindon Station

(twenty-five miles from Dunedin), in the Taieri Gorge, and Barewood (thirty-seven miles) there are quartz-reefs being worked. In traversing the Strath-Taieri the line passes the Blair-Taieri Village Settlement (forty-four miles), Middelmarsh, a rising township (forty-eight miles), and reaches Hyde (sixty-four miles). The line passes through the Poolburn Gorge across the Manuherikia River to Chatto Creek, thence to Alexandra, at the junction of the Manuherikia and Clutha Rivers, and on to the present terminus, at Clyde. Central Otago has a great future before it, as, in the opinion of experts, it is naturally adapted for producing fruit of different kinds in perfection, and almost any crop, if irrigated.

Another means of access to Central Otago is by the Clutha Valley. Two miles beyond Milton the Lawrence branch leaves Clarkesville Junction, runs up the Tokomairiro River and the gorge of Manuka Creek, and down to Waitahuna (fifty-three miles from Dunedin) and Lawrence ((sixty miles), gold-mining centres, with a population of 1,139. This line is being extended towards Beaumont and Roxburgh. Gold was first discovered in the Lawrence district in 1861, and the mines are still yielding. From Lawrence a coach runs to Beaumont (seventy-two miles), on the Clutha River, and thence up the Clutha Valley. Crossing the Beaumont Bridge the road follows the west bank of the Clutha, passing numerous dredging-claims. At eighty-nine miles is Ettrick, and seven miles further on is Roxburgh—the Teviot—(ninety-six miles), a borough of 441 inhabitants. The district surrounding Roxburgh is famous for the quantity and quality of its fruit-crops.

Following the main road along the west bank of the Clutha River the traveller reaches Alexandra South (122 miles) and Clyde—the Dunstan—(130 miles), the county town of Vincent County. The next place of importance is Cromwell (143 miles), at the junction of the Kawarau River with the Clutha. Cromwell is a borough of 587 inhabitants.

If the traveller wishes to pursue his journey farther he can either follow the road up the Clutha to Newcastle and Pembroke, on Lake Wanaka, or take the Kawarau Gorge road by way of the Crown Terrace to Queenstown, on Lake Wakatipu.

Queenstown is a borough situated on the shores of Lake Wakatipu, has a population of 696, and is the centre of a large gold-mining district. The chief feature of Queenstown is the grand mountain and lake scenery in the neighbourhood, which attracts large numbers of tourists every year. There are two ways of reaching Queenstown—the one by the Clutha Valley and Kawarau Gorge as above described, and the other by rail to Kingston, at the foot of Lake Wakatipu, and thence by steamer, which runs to suit the trains.

The Tautuku bush, in the south of Otago, has only lately been opened up, but already a large number of settlers are making their homes there. Starting from Balclutha the Catlin's River branch line runs southwards to Romahapa (sixty-one miles from Dunedin) on the crossing of the main road to Port Molyneux, thence to Glenomaru (sixty-five miles), Ōwaka (seventy-two miles from Dunedin), and the present termination at Houipapa, about five miles further on. The Catlin's-Waikawa main road is formed the whole way through, as are also numerous district roads, and the railway is being extended to Tahakopa, ninety-three miles.

Fruit.

There are some fine fruit-growing districts in the valley of the Clutha, from below Roxburgh right up to Lake Wanaka. The summers are dry and warm, and the soil suitable. Apricots, peaches, &c., come to maturity fully a month before they do at Dunedin, and grapes ripen in the open air. There is a great future for this neighbourhood in the growing of those varieties of fruit which agree with and thrive in a dry climate. Apples, pears, and plums also succeed well; in fact, the mild winter, followed by bright and hot spring and summer weather, is ideal for deciduous trees, introducing fine quality and splendid colour in the crops produced, while the Otago Central

Railway has brought portion of the valley into direct communication with a market.

Crops.

The following are the agricultural statistics as at April, 1911, the area and production being estimated:—

Total area in occupation in the Otago District, including sown grasses and land in native grass, &c., 7,997,952 acres. Corn-crops sown for threshing, chaffing, and feeding-off, comprising wheat, oats, barley, rye, maize, peas, beans &c., 193,994 acres; green, root, and other corps, 136,995 acres; grasses sown for seed and hay, 9,500 acres; land ploughed and sown in grass, 818,416 acres; surface-sown grasses, 227,346 acres; plantations, &c., including private gardens, market-gardens, orchards, and vineyards, of a quarter of an acre and upwards, 11,617 acres; land ploughed but not planted, 40,220 acres; area in tussock or native grass, 6,569,364 acres.

	Acres.	Estimated Yield per Acre.	Total.
Wheat for threshing...	62,171	23 bushels	1,429,933 bushels.
Oats " ..."	65,542	30 "	1,966,260 "
Barley " ..."	3,574	25 "	89,350 "

Stock.

	Head.
Sheep, as at 30th April, 1910	2,876,147
Horses, as at April, 1911	45,320
Cattle, " 	104,755
Swine, " 	25,499

The dairy industry continues to flourish and expand in Otago, and new lands are continually being brought under cultivation.

Railways.

The principal lines are as follows: (1.) The main trunk line from Dunedin to Christchurch, with branches from Oamaru to Hakataramea, forty-three miles; and Oamaru to Ngapara and Tokarahi, twenty-five miles; also, Palmerston to Dunback, nine miles. (2.) The main trunk line, Dunedin to Invercargill, with branches—Mosgiel to Outram, nine miles; Milton, *via* Lawrence, to Big Hill, thirty-one miles; Stirling to Kaitangata, four miles; Balclutha to Houipapa, twenty-five miles; and Waipahi to Edievale, twenty-four miles. (3.) The Otago Central, from Wangatui to Clyde, 134 miles. The Catlin's River Railway is under construction from Houipapa to Papatowai, 13½ miles, and the Waimahaka-Catlin's Railway for 8½ miles from end of station-yard at Waimahaka. Work is being continued on the Lawrence-Roxburgh line beyond Big Hill with a view to taking it to Beaumont. A line from Riversdale Junction to Switzers, fourteen miles in length, has recently been completed and opened for traffic. An extension of the western line from Waihoaka to Tuatapere, on the east bank of the Warau River, has been completed and opened during the past year. This section is eight miles in length.

Statistical.

The total population of the Otago Land District on the 2nd April, 1911, was 132,402.

Area of Otago Land District: Open land below 2,000 ft., 5,230 square miles; forest land below 2,000 ft., 1,710 square miles; open land above 2,000 ft., 6,177 square miles; forest land above 2,000 ft., 500 square miles; area of lakes, &c., 262 square miles: total, 13,879 square miles, or 3,882,800 acres.

The following table shows the disposition (approximately) of the land in the Otago District on 31st March, 1911:—

	Holdings.	Acres.
1. Lands finally alienated, comprising freehold land and vested reserves (net area after deducting land acquired under Land for Settlements Acts, &c.)	...	1,986,242
2. Lands held on deferred payment, rural	8	1,658

	Holdings.	Acres.
3. Lands held on perpetual lease, rural...	158	26,515
4. Lands held under occupation-with-right-of-purchase clause	287	52,637
5. Lands held on lease in perpetuity, ordinary Crown land, rural	801	198,205
6. Lands held on renewable lease, National Endowment land, rural	129	19,911
7. Lands held under agricultural lease on goldfields	17	550
8. Lands held under Mining Districts Land Occupation Act	269	9,684
9. Lands held under village settlement, deferred payment	2	100
10. Lands held under village settlement, perpetual lease	14	292
11. Lands held under village settlement, lease in perpetuity	105	1,629
12. Lands held under village settlement, renewable lease	7	73
13. Lands held under village-homestead special settlement, perpetual lease	69	1,006
14. Lands held by special-settlement associations, lease in perpetuity	14	2,765
15. Lands held as small grazing-runs	353	1,134,785
16. Lands held under pastoral license, not including bush	240	3,752,805
17. Lands held under lease or license for miscellaneous purposes, exclusive of gold-mining	864	113,790
18. Lands acquired and disposed of as lease in perpetuity under Lands for Settlement Act, rural	535	108,690
19. Lands acquired and disposed of as renewable lease under Lands for Settlements Act, rural	114	77,658
20. Lands acquired and disposed of as small grazing-runs under Lands for Settlements Act	10	10,953
21. Lands acquired and disposed of as pastoral homestead sites under Land for Settlements Act	3	984
22. Lands acquired and disposed of as miscellaneous licenses under Land for Settlements Acts	82	2,347
23. Crown Lands open for selection (including Land for Settlements Act), exclusive of pastoral runs	...	12,166
24. Crown Lands being prepared for selection	...	156,080
25. Lands open for application under pastoral license	...	Nil
26. Lands held by aboriginal Natives	...	16,324
27. Lakes, and Clutha and Taieri Rivers	...	263,200
28. Balance of Crown lands, including mining reserves, public reserves not vested, bush lands, roads, barren country, &c.	...	931,751
Total area of district (13,879 square miles)	...	8,882,800

Tenants of land included in 2, 3, 4, 5, 9, 10, 11, and 14 have the right of acquiring the freehold. There is no right of acquiring the freehold for tenants of lands included in 6, 7, 8, 12, 13, 15, 16, 17, 18, 19, 20, 21, and 22.

THE SOUTHLAND LAND DISTRICT.

H. M. SKEET, Commissioner of Crown Lands.

Boundaries.

The Southland District may be stated to comprise the Counties of Fiord, Stewart Island, Southland, Wallace, and part of Lake, and is bounded on the north and east by the Otago District, and on the south and west by the Tasman Sea, and may be said to lie between south latitudes 45° and 47° and

east longitudes 166° 15' and 169° 15'. For administrative purposes, however, the Snares, Auckland, Enderby, Campbell, Antipodes, Bounty, and all other islands within the limits of the Dominion south of the 47° parallel of south latitude are included in it.

Area and Physical Features.

The total area of the district, including Stewart Island, but exclusive of Solander, Ruapuke, and the other small islands enumerated above, is 7,583,892 acres, of which 2,400,000 are covered with bush. A considerable area in the Fiord County consists of wild alpine country with scrubby bush reaching to the snow-line. This little-known country extends to the western sea, and there presents the remarkable indentations of the coast-line known as the West Coast Sounds. The whole region is a paradise for the artist, and, indeed, for all enthusiastic lovers of nature, but has little attraction for the agriculturist or pastoralist. The bush land suitable for timber lies in the neighbourhood of Forest Hill, Rowallan, Alton, Longwood, Hokonui, Waikawa, and on Stewart Island. The timbers of commercial value are totara, rimu, miro, matai, kahikatea, rata, towai, and kamahi, in mixed bushes; but *Fagus fusca* and other beeches predominate on the high lands.

The open land in Southland and Wallace Counties, in its natural state, carries tussock and snow-grass, fern, flax, manuka, &c., and there is a considerable area of marshy land, interspersed here and there with peat bogs.

Perhaps the most striking feature, if we exclude the Fiord country, is the number of well-defined rivers and valleys of the district, the latter often widening out to some extent with gravel beds as they run through very extensive plains. Commencing with the eastern side, the Mataura, Oreti (or New River), Aparima (or Jacob's River), and Waiau are the most prominent illustrations of this; but these rivers by no means exhaust the list, as they all have numerous tributaries, which exhibit the same features on a lesser scale.

Speaking generally, the watersheds of these rivers do not attain any great height until followed far inland, and near the great lakes to be presently noticed. From what has been said above, it follows that the extensive plains and valleys referred to are of alluvial formation, in many places of very rich and fertile quality, and capable of raising crops of every known product, subject, of course, to climatic limitations. Generally these plains and valleys rise from the river-levels in a very gradual slope, sometimes into a series of terraces from 10 ft. to 50 ft. in height, and sometimes into undulating hills intersected at frequent intervals by lateral gullies affording natural drainage and an abundant supply of water.

These hills are covered with an indigenous growth, consisting of tussock and other grasses, fern, flax, &c., and even in their native state afford excellent grazing for sheep.

Near the large lakes, such as Wakatipu, Te Anau, Manapouri, Hauroto, and others, and between these and the west coast, the country becomes very high, often reaching 5,000 ft. and 6,000 ft. above sea-level, with very steep and rugged spurs. But these features are seen more prominently in the almost inaccessible Fiord country before referred to, and also in the West Coast Sounds. The open country of the interior occasionally presents a number of low ridges and lesser mountain-tops covered with tussock and other herbage, affording admirable pasture for sheep in summer; but stock have to be removed from April to October, during which period this part of the district is generally covered with snow.

Southland does not contain so much forest as most of the North Island districts, and this, with its extensive tussock-covered plains before referred to, will account for its early and extensive settlement; nevertheless there are considerable areas of forest in the eastern, southern, and western parts, and on Stewart Island, and a large export trade is done in the different kinds of pine and other timbers used for building, engineering, furniture-making, &c.

From what has been said of the river systems it will be evident that the country is well supplied with water, although none of the rivers can be used for purposes of internal communication; but the plains are traversed by railways for considerable distances from the principal towns, and where the railways end communication is continued by good roads, so that there is probably no part of the Dominion better off for means of transit; and with the Bluff Harbour the Southland District would seem to possess every facility.

Agriculture.

Having already touched on the character of the soil, it only remains to say that the plains, terraces, and lower hills are well adapted for raising wheat, oats, and other cereals, turnips, mangolds, beets, and the various other crops common to temperate climates. Wheat is not so widely grown as it might be, for the reason, probably, that the pastoral branches of farming receive more attention than the agricultural, and wheat is not required for these, whereas oats are largely grown for export and to feed sheep in the form of chaff; turnips also are much cultivated for winter food. Where wheat is grown the yields are very satisfactory, ranging from 40 to 60 bushels per acre, while oats frequently give 70 to 80 bushels.

Potato growing is now an important industry.

There are extensive deposits of limestone throughout the district. At Limehills a large plant has been put up which turns out agricultural and building lime in large quantities. This is a great boon to the district, and owing to its free carriage by railway up to distances of 100 miles farmers are enabled to go in for extensive liming of their holdings.

Owing to the introduction of the drain plough of recent years considerable areas of land are now capable of being brought into a high state of cultivation, which on account of excessive moisture or their swampy nature were formerly only fit for rough pasturage.

Dairy-farming, &c.

Dairy-farming now forms a very important industry in this district, forty-nine factories having been established. In this connection the Customs Department returns (for year ending 31st March of the present year) for this district show that 96,848 cwt. of cheese, valued at £244,794, was exported.

Sheep-farming.

By far the most important industries are those connected with the raising and export of mutton and wool. Some years ago sheep-farming was much hindered by the inroads of rabbits; but owing to the repressive measures adopted there has been a marked abatement of the pest. The hill-country, although it does not carry a large proportion of stock to area, is eminently healthy. The average carrying-capacity over the whole district would probably be slightly over two sheep to the acre. Until within the last few years most of the runs were stocked with merinos, but owing to the carcase being unacceptable to the European market, these sheep have, generally speaking, been replaced by Leicesters, Lincolns, Romney Marsh, Cheviot, and crossbreds of various kinds, better suited to the existing demands. The total number of sheep on the books of the local Stock Department reaches 1,072,946. This number is distributed over Southland District. A number of large establishments for slaughtering and freezing sheep are at work. Two are situated at the Bluff, and another at Mataura (on the Main Trunk Railway line). A large establishment is being erected in ferro-concrete at Makarewa Junction. It is expected to be ready for occupation next January. It will have a killing-capacity of 3,000 per day, and it is expected to be one of the most up-to-date slaughtering establishments in the Dominion. Beef, mutton, and rabbit tinning works have been in operation for some years at Woodlands. The exports from these factories (frozen meats) as returned for the year ended 31st March, 1911, are as follows: Frozen beef—2,822 cwt., value £3,183; mutton—61,377 cwt., 127,880 car-

cases, value £79,914; lamb—115,820 cwt., 361,388 carcasses, value £187,966; rabbit—50,366 cwt., 1,847,480 carcasses, value £38,481; rabbit-skins—1,218,241, 183,024 lb., value £14,938; whilst the export of wool was 9,235,522 lb., value £370,557.

Industrial (Coal, Gold, &c.).

Extensive seams of coal and lignite are distributed over the district, and a large deposit of brown coal is being worked by the Nightcaps Coal Company and other mines in the vicinity. The coal is used throughout the district, and its utility has been recognized by the Railway Department, some 19,700 tons having been used on the Southland section of New Zealand railways during the past year. The total output for the year was 66,500 tons, in addition to 74,000 tons of lignite. A deposit of shale covering a fair area exists at Orepuki, and very extensive works have been erected in connection therewith. From various causes, however, they have been closed down for the last few years. In view, however, of the increased demand for all fuel, there is every probability of the works being reopened in the near future. Gold is found all over the district, and is being obtained either by sluicing or dredging. A considerable amount of capital has been invested in river and beach dredges worked by steam. The dredging operations of the past year have for the most part been confined to the streams lying east of the Maitara River. Forty-seven dredges are now working, and the yields of gold, although of an intermittent character, have, on the whole, been satisfactory: output during 1910-11, 19,719 oz., valued at £78,746. Payable gold-bearing reefs also exist in Preservation Inlet and at Stewart Island. Among the lesser industries the preparation of the fibre of the native flax plant (*Phormium tenax*) is worthy of notice. The plant is found all over this district: twenty-seven mills are in existence, and in 1910-11 some 687 tons were graded and exported from the Bluff.

Timber.

Last, but of considerable value in results, the timber industry of the district merits attention. At the end of 1910 there were sixty-six sawmills working in Southland: trade has improved—output, 48,000,000 sup. ft., an increase of 9,000,000 sup. ft. for the year.

Fish.

Salt-water fish abound in great numbers in the waters surrounding Stewart Island, and oysters are found on banks between that island and the Bluff. Fish are largely exported to Melbourne, some 6,588 cwt., of the value of £9,953, having been frozen and exported from the Bluff, as also large numbers of oysters during the open season. Freezing-works have been established at Stewart Island and Preservation Inlet. All the large rivers, and many of the tributaries, are well stocked with trout, while for heavy trout-fishing the Waiau and Oreti Rivers may be mentioned as amongst the finest in New Zealand. The Waiau and Aparima Rivers had salmon-spawn put into them some years ago, and, it is now believed, with success.

Fruit.

The small English fruits, such as gooseberries, currants, raspberries, strawberries, &c., grow in great profusion, as do also apples. Stone-fruits are not so common, although peaches, nectarines, apricots, &c., do well when trained against nursery-walls in favourable aspect. There is a jam-factory at Seaward Bush.

Climate.

The climate is bracing in winter, and warm and genial in spring and summer. The old residents state that there has been a marked decrease in the rainfall within the last decade, the average being now about 30 in. a year.

It may, however, be observed that more rain falls near the coast than inland, and also that the rainfall is more evenly distributed throughout the year than is the case in the northern part of the Dominion. The temperature varies from 40° in winter to 70° in summer.

Towns.

Invercargill, the chief town, was from the first well laid out with wide streets and liberal reserves in the town belts for recreation purposes. The town has become conspicuous by the architectural beauty presented to the visitor in the many fine buildings. Among these—all in brick, concrete, or limestone—the branches of the leading banks doing business are prominent, also many wholesale and retail mercantile houses. The Government Buildings are on a scale not often seen in a town of the same size, and a clock and chimes of New Zealand make have been placed in the central tower. The Corporation has built a town hall and municipal theatre at a cost of £23,800. It presents a very handsome appearance in brick and concrete, while the theatre has every convenience, together with large seating-accommodation and the electric light. The Corporation provides water and gas, also disposes of sewage, &c., for the citizens. The streets are well lighted, paved, and maintained. Artesian water is pumped to the top of a handsome brick tower—which, by the way, is a very conspicuous landmark—and stored there in a tank, from which most of the houses within the town boundaries are supplied. Visitors to the town, and especially those who have been absent for some years, cannot fail to be impressed with the prosperity of the place, as evidenced by the rapid growth of the suburbs. In all directions may be seen commodious and substantial villa residences, standing on what a few years ago were bare paddocks. The population of the borough was 12,782, and with the suburbs included reaches 15,858, by the census of April, 1911. Five railways concentrate here, one from the famed Cold Lakes, another from Dunedin and Christchurch, a third line communicates with the agricultural and pastoral country lying east of the Maitara River, known as the Seaward Bush line, a fourth line which branches into two at Thornbury opens communication with the extended area westward covered by the Wallace County and known as the Western District, while the short line to the Port of Bluff carries a heavy traffic—the main produce of the district—for export. Rope and twine, carriage and implement factories, flour-mills, sawmills, fellmongeries, a boot-factory, three bacon-factories, brick and pottery works, ironfoundries, furniture-factories, and various other industries are in active operation. A woollen-mill, the first in the district, is in active operation, and now manufactures blankets, tweeds, hosiery, rugs, and flannels, principally for local consumption, putting through about 1,500 lb. of wool per week. The works, erected at a cost of £15,000, are lighted throughout by electricity, and are said to possess the most up-to-date machinery in the Dominion, employing from twenty to thirty hands. The Government has purchased from the Miracle Cement-block Manufacturing Company the right to manufacture these blocks in Southland. An up-to-date plant has been established close to the railway siding, and it is understood that three boys can make per day seventy blocks 24 in. by 9 in. by 8 in. It is expected that a large business will be done in these blocks. In the summer season Invercargill, by the arrival of intercolonial steamers and express trains, may be said to be thronged with visitors and tourists desiring to view the beauties of Stewart Island or the more distant high alpine scenery and deep waters of the Cold Lakes District (Te Anau, Wakatipu, Manapouri, Hauroko, and the further lakes), for, doubtless, the combinations of scenery there presented in mountain, glacier, and lake are unexcelled in either hemisphere. A motor-car service has been introduced from Lumsden, to the cold lakes district, which has improved the travelling facilities considerably. It should also be men-

tioned that Stewart Island is now connected by means of a submarine cable used for telephonic communication, which is of the greatest service to business men and pleasure-seekers. Although the Bluff is the principal port, Invercargill is provided with a lesser harbour in the New River Estuary, forming its western margin, where there is a jetty with appliances for the use of small steamers and craft trading with Stewart Island and along the coast, the goods being handled within the town boundaries. A tramway crosses the estuary, connecting with the suburb of Otatara, and is open for traffic. The line is two miles in length, and when the contemplated extension to the Oreti River, and the extensive reclamation works of 2,000 acres now being undertaken in the estuary are complete, Invercargill will spread westward.

Campbelltown, situated at the foot of the hill known as the "Bluff," has become a place of some importance in the district, being identified with the Bluff Harbour. The population is 1,780. The town presents some good buildings—frozen-meat works, hotels, grain-stores, and shipping offices, all in brick. Perhaps the most conspicuous is the Government Post, Telegraph, and Customs Offices, with its clock-tower and chimes; while the railway offices, with hardly less proportions, and conveniences lately added to facilitate the easy handling of goods, assert the prosperity of the place. Connected by rail with Invercargill (seventeen miles—six trains daily), a very large shipping business is effected here in the imports and exports of the agricultural counties of Southland, Wallace, Lake, and Stewart Island, principally consisting in export of wool, grain, frozen mutton, rabbits, fish, cheese, butter, timber, flax, and oysters; and in imports of general merchandise, guano, coal, and hardwood timber. The trade in these commodities is one which has shown a steady expansion year by year, and this has called for more numerous shipping to provide the necessary transport. The interests of the port of Bluff are controlled by the Bluff Harbour Board, which has met the expansion as it arose, and has now provided what is probably the longest wharf in New Zealand—1,760 ft. long, with five lines of rails, well lit with electric light, and alongside which the largest vessels trading to New Zealand can find ample accommodation. Further berthage accommodation is contemplated in the near future, and the Board has entered upon the initial stages of construction of another wharf of 500 ft. in length, and having a depth of 24 ft. 6 in. alongside. The approaches to the harbour are well lit, and vessels can enter as easily by night as by day. Further extensive reclamation works are in hand.

The entries of shipping at the port of Bluff in 1910 show that 329 vessels, of 579,269 tons net register, entered the port during the year. This does not include the fishing and oyster fleet, of which there is a large number, and which enter and leave the port almost daily. Among the vessels coming to Bluff are the largest steamers of the New Zealand Shipping Company, Shaw, Savill, and Albion Company, Tyser, Federal-Houlder-Shire, and other lines trading to New Zealand. These principally come to take away the produce of this district though, owing to endeavours of the Southland merchants to obtain their goods direct from Britain at Bluff as first port of call, some of the steamers mentioned bring considerable cargoes of direct imports.

The Customs returns show that the value of the imports entering during the year 1910 was £506,905, while the value of the exports was £1,338,825.

The fishing and oyster industries continue to expand. There are some seventy fishing-vessels registered at Bluff—probably all have oil-engines—and there are three steamers. A special feature introduced in 1909 has been the fitting out of several large auxiliary vessels of, say, 30 tons, with refrigerating machines. These vessels go out for cruises lasting for about six weeks at a time, freezing their fish as caught, and on return to port the cases are conveyed to the freezing-works to be forwarded to the Melbourne market. In this way the operations of the fishing-vessels have been extended to the Sounds and for long distances from the port.

The Bluff is also the first and last port of call for steamers trading with Tasmania and Australia.

Trade of Bluff.

IMPORTS.

Merchandise	...	...	...	26,656 tons.
Minerals and guano	...	...	...	14,805 tons.
Coal	...	...	...	20,815 tons.
Timber	...	...	...	430,390 super. ft.

EXPORTS.

Grain	...	...	...	32,862 tons.
Merchandise	...	...	...	26,912 tons.
Frozen produce	...	...	...	11,020 tons.
Flax	...	...	...	1,990 tons.
Cheese	...	...	...	5,161 tons.
Wool	...	...	...	35,878 bales.
Timber	...	...	...	278,260 super. ft.

Next in size to Invercargill is the inland Borough of Gore, situated on the Mataura River, and at the junction of the Main Trunk Railway with the Waimea Plains Branch. Owing to this fact, and to the fertility of the land in the neighbourhood, Gore is rapidly growing in size and importance. A new hospital has been built, and the town now possesses many fine buildings. The population is 3,258. The new line of railway from Gore to Waikaka (twelve miles) is now open for traffic.

Riverton is a pretty little town, about twenty-five miles from Invercargill, with which it is connected by rail, which runs through to Orepuki and Tuatapere, on the east bank of the Waiau; it is situated on the estuary of Aparima, or Jacob's River. Riverton is the oldest settlement in Southland, and was a great resort for whalers in former years (population 936). The harbour is available for and used by coasting-vessels, but the principal carrying-trade is done by rail. There are several sawmills in the neighbourhood, this industry being largely carried on near the many timbered localities in the district.

Otautau, on the banks of the stream bearing the same name, is the county town of Wallace, and has a population of 744. It is the distributing centre of all that large area of agricultural and pastoral country lying between the Longwood Range and the Waiau River, and northwards to the Mararoa River. It has direct communication by rail with Invercargill, Nightcaps, and Orepuki. In Otautau large grain-stores are seen, flour-mills, and a dairy factory, while in the vicinity timber and flax mills are met with. The most direct inland communication with Lakes Manapouri and Te Anau is by road passing through the town and onwards. This route is well suited for vehicular traffic, but the favourite or more easy line of communication is by rail from Invercargill to Lumsden and onward by motor-car as before noticed.

The village of Nightcaps is reached by a short line of railway from Thornbury, on the Invercargill-Riverton line. A large colliery exists here. (See *Industrial, Coal, &c., ante.*)

The Borough of Winton (population 564) is on the Invercargill-Kingston Railway, about twenty miles distant from Invercargill, and is the centre of a good farming, sawmilling, and coal-mining district. A short line of railway has been opened from here to Hedgehope, an extensive agricultural locality lying some fifteen miles away in an easterly direction.

Lumsden is the junction of the Kingston (Lake Wakatipu), Invercargill, and Waimea Plains Railway lines. Coaches and motor-cars starting from here take passengers and mails to Lakes Manapouri and Te Anau and the surrounding country.

East of Invercargill are Edendale and Wyndham, both with railway connection, and surrounded by rich agricultural country reaching to Fortrose, with good roads. Fortrose is easily reached from Invercargill by the Seaward Bush Railway, which connects with the Wyndham Road at Waimahaka, distant about four miles north of Fortrose. It is surrounded by exceedingly fertile country, and the harbour (estuary of the Mataura River) can be

entered by coasting steamers. The Seaward Bush Railway is at present open for traffic to Waimahaka (26 miles from Invercargill), and is being extended towards Tokanui.

Eastward of Fortrose and about midway between that place and Catlin's River, is Waikawa, a township with a harbour for coasters, and a large area of surveyed Crown land around, with useful timber, available for settlement. Steamers trading with Dunedin and Invercargill call here and at Fortrose at regular intervals. A good export of timber occurs at Waikawa.

Stewart Island as a pleasure resort, although favourably known for a long time past, has come into special prominence during the last few years, and well repays a visit.

During the season which extends from November to April, there is a constant stream of visitors from the North and South Islands, and from Australia and other parts, the accommodation frequently being found quite inadequate to meet the demand. From the little township in Half-moon Bay numerous well-formed tracts lead to Paterson Inlet—a noble sheet of water—and to various other beautiful bays in the vicinity. These tracts, winding in and out through native bush, present fresh beauties at every turn, with occasional glimpses of some arm of the sea or a sheltered bay, wooded to the water's edge. Good fishing can be obtained in some parts of Paterson Inlet, whilst for the more venturesome a day in the Straits with hook and line will afford plenty of sport. Cutters, provided with auxiliary oil-engines, can be chartered at moderate rates to convey fishing or camping parties to any part of the Island.

There is good shooting at the head of the Inlet, the south-west arm, and the flats at the mouth of Freshwater River, the game consisting of swans, ducks, and pukeko, whilst pigeons and kakas abound all through the bush. Pheasants and deer have been liberated on the Island, and are reported to be thriving well. Trout have been liberated in Freshwater River, and when the river has been properly "snagged" there is no doubt that it will become a favourite fishing-ground.

Crown Lands for Selection.

A total area of about 24,171 acres is open for selection, and, in addition, an area of 367,840 acres still remains for future disposal. Information relating to these lands may be obtained from the Commissioner of Crown Lands, at Invercargill.

Statistical.

The following table shows the disposition of the land in the Southland Land District on 31st March, 1911 :—

	No. of Holders.	Area in Acres.
1. Lands finally alienated, comprising freehold land and vested reserves (net area after deducting land acquired under Land for Settlements Acts, &c.)	..	5,089,364
2. Lands held on perpetual lease, rural	47	7,528
3. Lands held under occupation-with-right-of-purchase clause, rural	434	91,694
4. Lands held on lease in perpetuity, ordinary Crown land, rural	361	95,240
5. Lands held under Mining Districts Land Occupation Act	27	1,047
6. Lands held under village settlement, perpetual lease	68	938
7. Lands held under village settlement, occupation with right of purchase	3	2
8. Lands held under village settlement, lease in perpetuity	283	4,371
9. Lands held under village-homestead special settlement, perpetual lease	46	524
10. Lands held under improved farms, occupation with right of purchase, rural	18	1,724

	No. of Holders.	Area in Acres.
11. Lands held under improved farms, lease in perpetuity, rural	25	2,815
12. Lands held under pastoral license, Crown land	67	689,862
13. Lands held under license for miscellaneous purposes ..	440	31,619
14. Lands acquired and disposed of on lease in perpetuity under the Land for Settlements Acts, rural	237	48,215
15. Lands acquired and disposed of on renewable lease under the Land for Settlements Acts, rural	17	3,360
16. Lands acquired and disposed of as small grazing-runs under the Land for Settlements Acts	2	2,808
17. Lands acquired and disposed of as miscellaneous licenses under the Land for Settlements Acts	12	1,426
18. Lands held under renewable lease, National Endowment, rural	69	8,591
19. Lands held under village-settlement renewable lease, National Endowment	24	378
20. Lands held as small grazing-runs, National Endowment	20	66,550
21. Lands held under pastoral license, National Endowment	28	670,000
22. Crown lands open for selection	..	24,171
23. Crown lands being prepared for selection	..	*20,280
24. Balance of Crown lands which includes an estimated area of 140,127 acres occupied by roads, rivers, lakes, &c., and 233,698 acres of barren country	..	721,385
	2,228	7,583,892

Tenants of land included in 2, 3, 4, 6, 7, 8, 10, and 11 have the right of acquiring the freehold. Tenants holding under 5, 9, 12, 13, 14, 15, 16, 17, 18, 19, 20, and 21 have not the right to acquire the freehold.

Besides the foregoing the Lands Department administer an area of 449,858 acres of ordinary endowment lands, which is held by 663 tenants, and an area of 2,042 acres of permanent reserves held by twenty-five tenants. These areas are part of area included in item No. 1.

* In addition to the area of 20,280 acres of Crown land being prepared for selection, an area of 5,400 acres of Endowment land is under survey.

NEW ZEALAND'S EXTENDED BOUNDARIES.

NOTES ON THE COOK AND OTHER ISLANDS ANNEXED TO NEW ZEALAND
IN 1901.

The Pacific islands annexed to New Zealand in pursuance of resolutions passed by the House of Representatives in September and October, 1900, were Rarotonga, Mangaia, Mauke, Atiu, Aitutaki, Mitiaro, Hervey Islands, Palmerston, Niue, Danger, Rakahanga, Manihiki, Penrhyn, and Suwarrow. Takutea and Nassau, not mentioned in the resolutions, also lie within the boundary-lines prescribed by the Imperial Order in Council and the New Zealand Proclamation dealing with the annexation. The Cook and other Islands Government Act, passed in 1901 by the New Zealand Parliament, continued the Federal Parliament of the Cook Islands and the several Native Councils under the names "Federal Council" and "Island Councils." The Constitution of the Island Councils was altered in 1904, and each Island Council now consists of nine members, the Resident Agent being *ex officio* a member and President, the Arikis being *ex officio* members, and the remaining members being elected by the adult Natives of the island for a term not exceeding three years. The Federal Council has power to enact Federal Ordinances for the government of all the islands excepting Niue, while each Island Council can make local Ordinances governing the inhabitants within its jurisdiction. No Ordinance passed in the islands, however, can have the force of law until assented to by the Governor of New Zealand in the name and on behalf of His Majesty; and the Governor has power, by Order in Council, to direct that any of the laws in force in the islands at the commencement of the principal Act shall be repealed or modified. The Governor in Council has power also to apply to the islands any law in force in New Zealand, either in whole or with modifications, excepting the laws relating to alcoholic liquors. The Licensing Act, 1908, contains special provisions dealing with the question of liquor in the Cook and other Islands. The New Zealand Customs Tariff is, with certain exceptions, in force within the extended boundaries, and the Governor, by Order in Council, may from time to time modify the tariff as applying to any of the islands.

The laws are enforced through the High Court, which has jurisdiction throughout the whole of the islands excepting Niue; and, in the Cook Group, until 1905, there were also the Arikis' Courts, which were composed of Native Judges, except at Aitutaki, where no Court was legally constituted unless the European Magistrate was present. The Arikis' Courts have, however, been abolished in all those islands in which a European Resident Agent has been appointed, and the jurisdiction and power of these Courts or a Judge thereof are now exercised by such Resident Agent. The High Court

has exclusive jurisdiction in all cases of murder or of assault with intent to commit murder, and in all cases of manslaughter; in all criminal charges against foreign residents; and in all cases between foreign residents, or between foreign residents and Maoris in which the plaintiff may, with the consent of the Chief Judge, begin an action in the Court, or may with the same consent seek redress for any wrong alleged to have been done by any local Government in any island. The High Court has also jurisdiction in probate and insolvency, and the Resident Agents' Courts have jurisdiction in civil cases where the matter at issue does not exceed in value £50. The Chief Judge has power to send any case of a criminal charge against a foreign resident for trial before a Court constituted under the provisions of the Pacific Order in Council. The headquarters of the High Court are at Rarotonga, where it sits once a week, but visits are periodically made to the other islands within its jurisdiction. Appeals are allowed from the local Courts to the High Court, and from the High Court to the Supreme Court of New Zealand, and thence to the Court of Appeal.

The annexed islands were formerly all under one administration, but in 1903 Niue was placed under a separate administration and a separate Resident Commissioner, and the Federal Council and the High Court of the Cook Islands have now no jurisdiction in that island. Captain James Eman Smith is Resident Commissioner of the Cook Islands, and Mr. H. G. Cornwall is Resident Commissioner of Niue Island.

Rarotonga.

Rarotonga is certainly the finest island in the Cook Group, both in point of scenic attractions and in respect of its general productiveness. It is a particularly good specimen of the volcanic order of islands, and the rugged grandeur of its mountain-peaks and the variety and luxuriance of its vegetation combine to present one of the most romantic and picturesque scenes that one could possibly find even in the South Seas, where the romantic and picturesque are supposed to abound. Attaining, as it does, a height of 2,100 ft., the island is well watered; and a belt of rich soil, varying from one to two miles in width, extends all round from the mountains to the sea. The circumference of Rarotonga is over twenty miles, and the total area is 16,500 acres. The land at present is not being utilized to anything like the full extent of its possibilities; but the Land Titles Court is doing good work, and the island has now been surveyed, and owners ascertained for each block. With the advent of a larger European population a steady increase in the yield of the staple products of the island may be looked for. In the case of copra it will be some years before the production can be greatly increased, but the cocoanut-palm is being extensively planted, and, given favourable conditions, the results may be awaited with confidence. The banana trade is developing very satisfactorily, and large areas are being planted with this fruit. Rarotonga is particularly well adapted to the growth of the

banana, and the outlook so far as this item is concerned is distinctly hopeful. Avarua, on the north coast, is the principal village of the island, and the seat of the Islands Administration. It is also the port of call for the Union Steam Ship Company's steamers, which visit the Group twice a month, once from Auckland and once from Wellington. A substantial building known as the "Whare Manuhiri" has been erected here for the accommodation of visitors, and it is expected that a tourist traffic will be developed. A refrigerating and ice plant, subsidized by the Islands Administration, is now at work in Rarotonga. The Native population of Rarotonga is 2,620, in addition to which there are 138 whites on the island.

Mangaia.

This is one of the largest of the annexed islands, being about thirty miles in circumference, and having an area of some thirty square miles. Given proper landing facilities, it would be in no way behind Rarotonga, except in the lack of that impressive mountain scenery that lends such a charm to the latter island. Mangaia is somewhat peculiar in structure. At a short distance inland from the shore there rises an almost perpendicular wall of dead coral, about 100 ft. high, as if the reef of earlier days had been lifted bodily by some convulsion of nature. This *makatea*, as it is called, runs right round the island, and is perforated by numerous caves and crevices, which in olden times were used as depositories for the dead, as well as for storage and other purposes. These caves still supply, in the calcareous formations in which they abound, the material from which the Natives manufacture some of their household implements. The top of the *makatea* averages about a mile in width, and is well adapted to the growth of the citrus family of fruits. The interior face of this coral rampart slopes down gradually into a basin of rich swamp land containing extensive taro-plantations, and from this the land rises again in a succession of low hills to a central plateau, about 650 ft. high, known as the "Crown of Mangaia." These taro-swamps still supply most of the food of the Mangaians, although for many years the tribes have lived in the Villages of Oneroa, Tamarua, and Ivirua, on the coast. The interior of the island, which contains some splendid valleys, is well watered by streams which filter through below the base of the *makatea* into the sea. The population, according to the latest returns, is 1,466, in addition to three whites. The people are said to display a greater degree of industry than is usual among Natives of the Pacific islands, and this fact, combined with the natural resources of the island, promises well for the future prosperity of Mangaia. There are considerable areas of waste land awaiting cultivation, and the Natives are becoming alive to the necessity for planting these with cocoanuts, &c. Citrus fruits are already growing in profusion, and it is estimated that with proper cultivation the output could be increased twenty-fold. Mangaia produces the best coffee in the Group at present. The principal

exports are bananas, oranges, copra, coffee, pines, kumaras and taros, cocoanuts, and limejuice. The trade of the island has hitherto been hampered to a considerable extent in consequence of the difficulty in shipping produce. The reef, which encircles the island at a short distance from the shore, is without an opening, and communication between the island and outside can only be obtained by crossing the reef in Native canoes. This process, where cargo is concerned, is necessarily slow and costly—it takes as long to ship 50 tons over the reef at Mangaia as it does to ship 200 tons at Rarotonga—besides which the produce is always liable to be damaged by salt-water. Steps are being taken, however, to have suitable boat-passages opened through the reef, and when this has been accomplished the chief hindrance to the development of the trade of this island will be removed.

The Resident Agent at Mangaia is Mr. J. C. Cameron.

Mauke.

This island is low and flat, and is skirted by a belt of ironwood (*toa*), which was formerly found in large quantities, and was much sought after by traders. Mauke, like Mangaia, has a fringing reef which, however, does not so readily lend itself to the process of crossing in canoes that obtains in Mangaia. A landing has to be effected on the edge of the reef itself, and one reaches dry land by wading or being carried through the shallow water covering the depression in the coral between the outer edge and the shore. Mauke also has its *makatea*, or raised-coral area, but it merges almost imperceptibly into the volcanic formation of the centre, and the general level of the island all over is about 60 ft. above the sea. The island is small, its area being only about four and a half square miles; but it is remarkably fertile, and, notwithstanding that in common with the other islands of the Group it is very imperfectly planted, it exports a considerable quantity of copra and oranges. The island has now been surveyed and subdivided. Tamuera Tangata is Resident Agent on Mauke. The Native population of the island is 447, the whites numbering nine.

Atiu.

This island is much like Mauke in appearance, having the same high fringing reef and the same dead-coral formation over the greater part of its area. It is much larger, however, its area being about thirty-two square miles, and it has four times as much unused land as Rarotonga. Atiu is a valuable island, and exports good quantities of copra, oranges, coffee, and limejuice. All the usual island fruits grow well, but a fuller development of the resources of the island is retarded through the lack of proper facilities for shipping produce. Arrangements have been made, however, as in the case of Mangaia, to have a boat-passage formed through the reef at the earliest possible moment. The cavernous formation, which is

so marked a feature of the *makatea* at Mangaia, is also present in the coral-rock portion of Atiu, and must, no doubt, be found more or less in all islands that owe their existence in any degree to the upheaval of a sea-worn coral reef. The late Ngamaru Ariki was practically King of Atiu, although he had lived for many years in Rarotonga, and as such he exercised a measure of sovereignty over Mauke and Mitiaro, both of which were conquered by the Atiuans prior to the introduction of Christianity. The population of the island is about 810 Natives, and one white, but this does not represent anything like the total of the Atiuan tribes. They are largely represented in the subordinate islands, as well as in Tahiti.

The settlement at Atiu is some distance inland, on the flat summit of the low central hill to which the island rises. The Resident Agent is Mr. J. T. Large.

Aitutaki.

Aitutaki combines the features of the volcanic island and the atoll; indeed, it may be regarded as an atoll in course of formation, and it affords a good illustration of the different stages of the process. The island is almost surrounded by a barrier reef, which supports several fruitful islets, and on the south-east lies five miles distant from the land. On the western side it approaches much nearer, the entrance to the Avatapu Channel being about three-quarters of a mile from the wharf at Arutanga, the principal village on the island. At the northern point of the island the reef fringes the shore as in the other main islands of the Cook Group, the barrier stage having not yet been reached. This island approaches more closely to Rarotonga in the general appearance of fertility than any of the others, and it can also claim to possess a considerable degree of scenic attractiveness. It rises somewhat abruptly on the western side to a height of 360 ft., and slopes away gradually to the eastern coast. The area is about seven square miles. The lagoon on the Arutanga side of the island is shallow, and can only be used by vessels of a very small class; but on the eastern side it is much deeper, and freer from coral patches, and there are several places in the reef where, it is believed, a navigable channel might be formed. The land at Aitutaki is divided among the people in small sections; but though each family has quite enough land for its support, it has seldom more than an acre or two in any one place, and the more remote sections are apt to be neglected. The Native population is about 1,221, two-thirds of these living in the four settlements on the western side, and the remainder in the Villages of Vaipae and Tautu on the east. In addition there are a number of absentees. There are twelve white people on the island. The Resident Agent is Mr. J. McCulloch.

Penrhyn.

Penrhyn is a good specimen of the pure atoll. It is merely a ring of coral, about forty-eight miles in circuit, supporting a

number of low islands, from 200 to 300 yards across, and enclosing a lagoon of ninety square miles in area, of which twenty-four square miles are more or less covered with pearl-shell. There are three passages into the lagoon, the principal one having a depth of 18 ft. at low water, and there is sufficient wharf accommodation at Omoka for the small class of vessel that visits the island. The other village at Penrhyn, Te Tautua, is some ten miles distant. The pearl-shell fishing is the main industry of the island, but considerable quantities of copra are now being exported also. The practice followed with regard to pearl-shell fishing is to divide the lagoon into three parts, which are alternately closed against fishing for a certain period. When the interdiction is removed from the area the Natives may dive without restriction beyond the payment of a small fee to the Government. After the naked diving has been in operation for a time the machines are allowed to be brought into requisition until the limit of time has been reached. That area is then closed, and the same procedure is repeated in another portion of the lagoon. By this means each area is given rest for about a year, and, as the shell is said to grow very rapidly at Penrhyn, the supply is well maintained. An Ordinance of the Federal Council prohibits the removal of shells of less than $4\frac{1}{2}$ in. in diameter. Over 90 tons of pearl-shell, representing an amount of £9,300, were exported from the northern islands during one year, and it would be safe to say that the greater part of this came from Penrhyn, from which island alone over 100 tons annually were formerly obtained. The lagoons at Penrhyn and Manihiki have been taken over by the Crown, and proclaimed as reserves for public pearl-shell fishing, and regulations controlling fishing have been made. The total population is 332 Natives and three whites. The Resident Agent is Mr. E. F. Hawk.

Manihiki.

Manihiki is also an atoll, but, unlike Penrhyn, it has no opening through the reef into the lagoon, and when the Natives wish to visit the neighbouring island of Rakahanga their boats have to be carried across the narrow strip of land separating the lagoon from the sea. The island consists of about two square miles of land, encircling a lagoon of some six miles in diameter. A good deal of pearl-shell has been obtained from Manihiki, but some years ago it was found necessary to close the lagoon, as the shell-beds had been fished almost to the point of exhaustion. The lagoon has been proclaimed a public reserve for pearl-shell fishing. The Natives of this island have some reputation for their skill in the manufacture of hats. Walking-sticks, paddles, &c., inlaid with pearl-shell, are also manufactured. The principal export is copra, and as the Natives are beginning to see the wisdom of thinning out the superabundant growth of their palms the production of this item should materially increase. The Native teachers of the London Missionary Society look after the education of the children of the island. The total population is 440, four of whom are whites. Mr. H. Williams acts as Resident Agent.

Mitiaro.

This is a small coral island lying about forty miles to the north-east of Atiu, and an equal distance from Mauke. Its area is only about four square miles, and it nowhere rises higher than 50 ft. above sea-level. It contains some good land, however, and produces a considerable amount of copra. In the centre is a pretty little lagoon, bordered by a belt of swamp. The population, according to the last returns, was 198 Natives and one white. Tou Ariki acts as Resident Agent.

Takutea.

This is the smallest island in the Cook Group, its area being about 300 acres. It lies about 125 miles to the north-east of Rarotonga, and close to the Island of Atiu. It belonged to the late Ngamaru Ariki, and was by him presented to His Majesty King Edward for the benefit of his subjects in the Group. The island is being systematically planted with cocoanut-palms, and it is anticipated that it will in time yield 200 tons of copra annually. At present it is uninhabited.

Palmerston.

Palmerston is an atoll, with a land-area of one square mile, lying to the north-west of Rarotonga, some 273 miles distant. The reef carries a number of small islets, which are in the occupation of the descendants of the late William Marsters, an old English sailor. One of these, Joel Marsters, acts as Resident Agent, and he and six other members of the family constitute the Island Council. The lagoon, which is about eight miles in diameter, does not carry pearl-shell at present, but it is hoped that spawn may be successfully introduced from other islands. The planting of the land is being well looked after by the Marsters family. The population is not available.

Manuae and Te Au-o-Tu.

These two small islands are enclosed within one reef, and are known as the Hervey Isles—a name that is frequently applied to the Cook Group as a whole. They contain approximately 500 acres and 1,000 acres respectively of good cocoanut land, and under the careful cultivation of Messrs. Bates and Greening, to whom they are leased, they will ere long produce an immense amount of copra. There are 29 Natives on the islands, employed as labourers.

Suwarrow.

Suwarrow is a valuable atoll, 530 miles from Rarotonga. Its value lies chiefly in its lagoon, however, the land-area being very small. The lagoon is from eight to ten miles long, and about eight miles across at the widest part, and it makes a splendid harbour, having an entrance sufficiently deep to admit vessels drawing up to 20 ft. of water. The island is under lease to Lever's Pacific Plan-

tations (Limited) "for the purpose of removing guano or other fertilizing substances therefrom, and of planting the land with cocoanuts, and for collecting pearl-shells, and for other purposes of a like nature." A portion of one of the reef islets, known as Anchorage Island, is vested in the Lords Commissioners of the Admiralty as a reserve for naval purposes. Large quantities of pearl-shell of excellent quality were obtained from the lagoon by the Pacific Trading Company, the predecessors of the present lessees; but diving has been discontinued for some time now, and the shell-beds are being given a long rest, the company having transferred its operations to Christmas Island. It is probable that on the expiry of the present lease in August, 1913, the Islands Government will take over the control of the lagoon, so far, at least, as machine-diving is concerned. It is estimated that one machine will obtain from 40 to 45 tons of shell a year at Suwarrow.

Rakahanga.

This island lies about twenty-five miles to the north of Manihiki. It is not so large as its neighbour, and the lagoon does not contain any pearl-shell, but otherwise the two islands are very much alike. They are owned and inhabited by the same people, and what has been said concerning Manihiki is true, for the most part, of Rakahanga also. The duties of Resident Agent are performed by Mr. Henry Williams, of Manihiki. Rakahanga has a population of 315 Natives, and there are a number of absentees.

Danger (Pukapuka).

This island lies away towards the north-west corner of the annexation boundary. Concerning it Colonel Gudgeon, late Resident Commissioner, writes, "At Pukapuka I found a very similar population, who have now some knowledge of the Rarotongan language, but whose language is not intelligible to the Maori of the Pacific. This is such a primitive people that I considered it advisable for the present to leave them under their own ancient form of government, inasmuch as they are seldom visited by Europeans, and produce only a little copra." The island is a small atoll of about three miles in diameter, and the lagoon produces some pearl-shell. The population numbers about 490.

Niue.

Niue was formerly in the Cook Islands Administration, but in 1903 the island was placed under a separate Administration, and Mr. H. G. Cornwall is at present Resident Commissioner. Niue, the largest of the annexed islands, having an area of a hundred square miles, and a circumference of forty miles by road, contains approximately 64,000 acres. It consists entirely of uplifted coral, and is probably the result of a series of upheavals. In general formation it takes the shape of two terraces, the lower being about 90 ft. above sea-level, and the other about 220 ft. At Alofi the

fringing reef is broken by a narrow boat-passage, partly natural and partly the result of improvements effected by H.M.S. "Mildura" a few years ago. Alofi is the port of entry for Customs. There are landing-places at Avatele and at Tuapa, where Togia, the "King" of Niue, resides. Ships may obtain good water at Alofi and Avatele at small cost. Although so rocky that it is for the most part unploughable, Niue is by no means unproductive. All the usual tropical fruits grow well, and large trees are found averaging from 18 in. to 2 ft. 6 in. in diameter, and in some cases attaining a diameter of 4 ft. and running up to 100 ft. in height. Large areas of the island are covered with forest, and it is estimated that there must be millions of feet of timber suitable for milling purposes, including ebony and other hardwood. A good deal of this timber, however, is situated in rocky country, and it is questionable if it would pay to cut it and bring it out. Niue is well roaded, there being about 65 miles of roads connecting the various villages with the principal landing-place. A careful survey of the land was made some years ago; the roads were traversed throughout, the area of the island determined, and the coast-line defined. There are many extensive caves in Niue, and concerning these Mr. Haszard, the surveyor who visited the island, says: "There is one at Lakepa, I was told, having passages which can be measured by the mile. One that I visited at Vaiopepe is extremely beautiful. It is situated about two hundred yards from the sea on the northern coast, and is formed of a number of galleries and terraces, one below the other. Stalactites and stalagmites are in great profusion, and group themselves into all kinds of fantastic shapes. In one gallery the roof appears to be studded with lilies carved out of alabaster. As one descends to the lower galleries the sensation is decidedly weird. The gurgling and reverberations of the swiftly flowing water is heard deep down in dark subterranean channels, which are evidently connected with the sea, for, ever and anon, a mighty gust of wind impelled by the huge rollers breaking on the reef outside, strikes the visitor, and it requires a steady nerve and a firm foothold to avoid being swept into the seething cauldron below. If these caves were in an accessible position they would be a great draw to tourists."

In consequence of the porous nature of the rock there are no streams in Niue, and consequently fresh water is scarce. A supply is obtainable from the caves, but the difficulty of carriage is necessarily considerable, and the water is frequently brackish. Concrete tanks have now been constructed in the principal villages. These are roofed over with galvanized corrugated iron, and provide a sufficient catchment-surface to fill them during the rainy season. The people thus have a reliable supply of good drinking-water.

The principal drawback to the development of Niue trade has been the want of regular communication, but this has now been overcome by the institution of a subsidized schooner service with Auckland, and it is anticipated that a considerable increase of trade

will follow. The chief industry is the manufacture of hats from a kind of pandanus by the Natives, who are very expert plaiters, and an extensive market is obtained for the hats in the neighbouring islands and New Zealand. Some 400 or 500 tons of copra are exported, and the production is capable of very considerable increase. The climate of Niue compares very favourably with other islands of the Pacific. The shade temperature in winter is about 70°, and in summer it rarely exceeds 96°. The Native population of Niue is 3,801, exclusive of about 580 absent in other islands or at sea. The Niueans are naturally of a roving disposition, and numbers of the men go to Tonga, Samoa, Malden Island, &c. Many go under engagement as labourers, and return on the expiration of their term. The white population numbers twenty-one persons. The Resident Commissioner, Mr. H. G. Cornwall, also acts as Postmaster, Collector of Customs, &c.

LAND.

No land is sold by the Natives of the Cook Islands or Niue, but considerable areas have been leased in Rarotonga to European settlers. It is recognized that the prosperity of the islands depends in great measure on the settlement of the spare lands by a good class of white planters, and it is hoped that before long additional areas in Rarotonga as well as portions of the adjacent islands of Mauke and Atiu will be open for lease. At present there are difficulties in the way of securing leases from the Natives, but the work of surveying the land and defining the Native titles is proceeding rapidly, and every effort is being made to bring the unused lands into profitable occupation. It is desirable that the intending settler should have a capital equal to at least £10 for each acre he purposes taking up. The cocoanut-palm takes from eight to ten years to reach bearing-point, and during that time the planter must maintain himself by growing bananas or securing some outside employment. When the palms are in full bearing, however, the annual value of the crop may be estimated at not less than £6 per acre, and this may be regarded as a practically assured income for sixty years or more.

EDUCATION.

The educational requirements of the islands are met by missionary effort. The London Missionary Society has established village schools in the various islands, and the Roman Catholic Mission and the Seventh-day Adventists are also maintaining schools, though to a less extent. The London Mission has six schools in Rarotonga, three in Mangaia, four in Aitutaki, one in Aitu, two in Mauke, one in Mitiaro, two in Penrhyn, two in Manihiki, one in Rakahanga, one in Pukapuka, and one in Palmerston. There is also a boarding-school at Tereora, Rarotonga, which has between sixty and seventy boarders, and a boarding-school at Araura, Aitutaki, with a similar number of scholars. The teaching in these

institutions is more advanced than that in the village schools, and they may be considered in the light of secondary schools for the Islands.

The Sisters of St. Joseph have a very good school at Avarua, Rarotonga, where music is included among the subjects taught; and in the Village of Titikaveka the Seventh-day Adventists have also a school.

A school with a European teacher has been established in Niue, and good work is also being done in the village schools of Niue, of which there are eleven, and one thousand children are there being taught reading, writing, and arithmetic in the vernacular. Nearly all the younger Niueans are able to read and write in their own language.

REVENUE AND EXPENDITURE.

Cook and Northern Islands.—For the financial year ending the 31st March, 1911, the revenue of the Cook Islands, not including the balance from the previous year, was £8,267, and the expenditure £8,047. There is a credit balance of £4,657. The following is a comparative statement of revenue and expenditure for the past eight years:—

Year.	Revenue.			Expenditure.		
	£	s.	d.	£	s.	d.
1902-3	6,584	13	4	4,725	16	11
1903-4	5,310	4	3	4,558	3	9
1904-5	5,574	14	1	5,093	8	8
1905-6	7,157	1	0	5,455	10	11
1906-7	5,046	14	11	6,416	6	6
1907-8	6,349	6	1	6,189	14	1
1908-9	7,146	9	1	5,718	3	7
1909-10	7,655	12	8	8,230	2	11
1910-11	8,267	0	0	8,047	0	0

Niue.—The revenue of Niue for the year ending the 31st March, 1911 (excluding balance from previous year), was £1,443 14s. 6d., and the expenditure £1,290 19s. 8d. The total funds to the credit of the Niue Government on the 31st March, however, amounted to £1,782 4s. 5d.

EXPORTS AND IMPORTS.

Cook and Northern Islands.—The value of exports for the year 1910, excluding specie (£9,560), was £81,189, while the imports, also excluding specie (£13,231), amounted to £70,564. The principal items exported were as follow:—

	£
Coffee, 58,400 lb.	1,243
Copra, 1,535 tons	27,281
Bananas, 106,568 cases, 11,814 bunches	35,807
Oranges, 94,024 cases	14,220
Pineapples, 5,128 cases	512
Pearl-shell, 26 tons	750
Cocoanuts, 103,780 number	419

The following shows the countries to which the exports were made :—

					£
New Zealand	..	..	..	..	66,832
United Kingdom	..	..	..	..	22,619
Tahiti	..	..	..	..	1,281
Niue	..	..	..	..	15
Fiji	..	..	..	..	2
					£90,749

The amount of the imports is made up as follows :—

					£
From New Zealand	..	..	..	..	64,958
" United Kingdom	..	..	..	..	8,252
" New South Wales	..	..	..	..	410
" Victoria	..	..	..	..	405
" United States	..	..	..	..	4,259
" Germany	..	..	..	..	328
" France	..	..	..	..	126
" Tahiti	..	..	..	..	3,990
" British Columbia	..	..	..	..	307
" Malden Island	..	..	..	..	106
" Japan	..	..	..	..	551
" India	..	..	..	..	81
" Tonga	..	..	..	..	22
					£83,795

Niue.—The exports for 1910 (excluding specie, £383) amounted to £11,829, and the imports to £8,882. The principal items of export were—

					£
Copra, 507 tons	..	..	..	..	8,161
Hats, 5,716 dozen	..	..	..	..	2,891
Fungus, 15,730 lb.	..	..	..	..	262
Yams, 24 tons	..	..	..	..	188

The exports were shipped to the following countries :—

					£
To New Zealand	..	..	..	..	9,702
" German Samoa	..	..	..	..	1,863
" America	..	..	..	..	9
" Australia	..	..	..	..	236
" Fiji	..	..	..	..	19
					£11,829

The imports represented (excluding specie, £300)—

					£
From New Zealand	..	..	..	..	7,276
" Australia	..	..	..	..	701
" Tonga	..	..	..	..	313
" Samoa, German	..	..	..	..	404
" Other Islands	..	..	..	..	42
" United Kingdom	..	..	..	..	61
" United States	..	..	..	..	62
" Germany	..	..	..	..	23
					£8,882

A P P E N D I X .

PRINCIPAL EVENTS.

DATES OF SOME OF THE PRINCIPAL EVENTS IN THE HISTORY OF NEW ZEALAND.

- Dec. 13, 1642.—Discovery of New Zealand by Abel Jansen Tasman.
- Oct. 8, 1769.—Captain Cook landed at Poverty Bay on his first visit.
- June 30, 1788.—Macaulay and Curtis Islands, of the Kermadec Group, discovered by Captain Sever, of H.M. transport "Lady Penrhyn."
- Nov. 29, 1790.—Chatham Islands discovered by Lieutenant Broughton, in H.M.S. "Chatham."
- Nov. 17, 1793.—Captain d'Entrecasteaux, with the "La Recherche" and "L'Espérance," discovered Raoul or Sunday Island. (The latter name was given by Captain Raven, of the transport "Britannia," who visited the island 6th Nov., 1796.)
- Nov., 1793.—Lieutenant-Governor King's (of Norfolk Island) visit to Doubtless Bay.
- 1795.—The ship "Endeavour," Captain Bampton, sunk at Facile Harbour, Dusky Sound.
- 1800.—Antipodes Island discovered by Captain Pendleton.
- 1806.—Auckland Isles discovered by Captain Briscoe, ship "Ocean," one of Enderby's whalers.
- 1806.—Ship "Venus" visited East Coast of New Zealand. She was taken by convicts at Port Dalrymple, Tasmania. Their visits gave rise to the Nga-Puhi southern expedition.
- 1807.—Defeat of Hongi and Nga-Puhi Tribe at Moremonui, ten miles south of Maunganui Bluff, Kaipara.
- 1809.—The taking and burning of the transport "Boyd" at Whangaroa.
- 1810.—Campbell Island discovered by Captain F. Haselburg, of brig "Perseverance."
- 1814.—First arrival of the Rev. Mr. Marsden at Bay of Islands, and introduction of Christianity. Horses, oxen, sheep, and poultry first brought to New Zealand.
- Aug., 1815.—Attempted capture of the "Trial" and "Brothers" at Kennedy Bay.
- 1818.—Hongi's and Te Morenga's great expedition to East Cape.
- 1819-20.—Patuone, Nene, and Te Rauparaha's raid on Taranaki and Port Nicholson.
- 1820.—Hongi visited England; returned to New Zealand July, 1821.
- 1820.—H.M. store-ship "Coromandel" visited Coromandel.
- 1820.—Rev. S. Marsden travelled from Wai-te-mata via Kaipara to the Bay of Islands—the first white man to do so.
- Aug., 1820.—The "Prince Regent" entered Auckland Harbour—the first vessel to do so.
- Nov., 1821.—Fall of Mauinaina Pa, Auckland Isthmus, to Hongi.
- Nov., 1821.—Ngati-Toa migration from Kawhia to Otaki under Te Rau-paraha.
- Dec., 1821.—Fall of Te Totara Pa, Thames, to Hongi.
- May, 1822.—Fall of Matakitaiki Pa, Waikato, to Hongi.
- May, 1823.—Fall of Mokoia Pa, Rotorua Lake, to Hongi.
- 1823, 1828.—Acts passed by the Imperial Parliament extending the jurisdiction of the Courts of justice in New South Wales to all the British subjects in New Zealand.
- 1824.—Fall of Te Whetumatarau Pa, near East Cape, to Pomare.

1825.—First attempt at colonisation by an expedition under the command of Captain Herd, who bought two islands in the Hauraki Gulf.

Feb., 1825.—Great defeat of Ngati-Whatua at Te Ikaaranganui, Kaipara, by Hongi.

1827.—Destruction of mission-station at Whangaroa by Hongi's forces.

Feb., 1827.—Admiral (then Captain) Dumont D'Urville anchored in Auckland Harbour.

1828.—Hongi died at Whangaroa, from wounds received at Hokianga.

1828.—The "Maquarie," Captain Kent, the first vessel to enter Kawhia.

March, 1829.—Brig "Hawes" captured at Whakatane by Maoris.

1830.—Battle of Taumata-wiwi, near Cambridge.

1830.—Fall of Kaiapohia Pa, Canterbury.

March 6, 1830.—Battle of Kororareka, between two Nga-Puhi Tribes.

Dec., 1830.—Death of Tama-i-hara-nui at the hands of Te Rauparaha's people. He was brought from Port Cooper by Captain Steward, brig "Elizabeth."

1831.—Tory Channel whaling-station established.

1831.—Application of thirteen chiefs for the protection of King William the Fourth.

Dec., 1831.—Pukerangiora Pa, Waitara, fell to Waikato.

Feb., 1832.—Repulse of Waikato at Nga-motu Pa, under Dicky Barrett.

1833.—Mr. Busby appointed British Resident, to live at the Bay of Islands.

1834.—Battle of Haowhenua and Pakakutu, near Otaki

1834.—Bishop Williams's first visit to East Cape.

April 29, 1834.—"Harriet" wrecked at Cape Egmont.

Oct. 1, 1834.—H.M.S. "Alligator" shelled and took Waimate Pa, near Opunake. First occasion of H.M. troops being employed in New Zealand.

1835.—Declaration of independence of the whole of New Zealand as one nation, with the title of "The United Tribes of New Zealand."

Nov. and Dec., 1835.—Ngati-Awa Tribes migrated to and conquered the Chatham Islands.

March 28, 1836.—Maketu Pa, Bay of Plenty, fell to Waikato.

May 9, 1836.—Te Tumu Pa, Bay of Plenty, fell to Te Arawa.

Aug. 5, 1836.—Battle at Matai-puku, Rotorua—Waikato beat Te Arawa.

Oct., 1836.—Siege of Toka-a-kuku, Te Kaha, Bay of Plenty.

1838.—The Roman Catholic Bishop Pompallier, with several priests, arrived at Hokianga.

Sept. 1, 1838.—H.M.S. "Pelorus" discovers Pelorus Sound.

April, 1839.—Taking of the French whaler "Jean Bart" at Chatham Islands by Maoris.

May 12, 1839.—Departure of the preliminary expedition of the New Zealand Company from England.

June, 1839.—Issue of Letters Patent authorizing the Governor of New South Wales to include within the limits of that colony any territory that might be acquired in sovereignty by Her Majesty in New Zealand.

Sept. 16, 1839.—First body of New Zealand Company's emigrants sailed from Gravesend.

Sept. 20, 1839.—Arrival in Port Nicholson of the preliminary expedition of the New Zealand Company under Colonel Wakefield.

Oct. 16, 1839.—Battle of Te Kuititanga, Otaki.

Jan. 20, 1840.—First steamer arrived in New Zealand.

Jan. 22, 1840.—Arrival of first body of immigrants at Port Nicholson.

Jan. 29, 1840.—Captain Hobson, R.N., arrived at the Bay of Islands. On the following day (Jan. 30) he hoisted the Union flag, and read the commission, under the Great Seal of the United Kingdom, which extended the boundaries of the Colony of New South Wales so as to embrace and comprehend the Islands of New Zealand; also his own commission as Lieutenant-Governor over territory that might be acquired in sovereignty.

Feb. 5, 1840.—Treaty of Waitangi signed.

May 21, 1840.—Date of Proclamations of sovereignty over the Islands of New Zealand.

June 17, 1840.—The Queen's sovereignty over the South Island formally proclaimed at Cloudy Bay, by Major Bunbury, H.M. 80th Regiment, and Captain Nias, R.N.

Aug. 11, 1840.—The British flag hoisted at Akaroa by Captain Stanley, R.N., and British authority established. The French frigate "L'Aube" arrived there on the 13th August, and the vessel "Comte de Paris," with fifty-seven immigrants, on the 16th August, in order to establish a French colony.

Sept. 18, 1840.—The British flag hoisted at Auckland. The Lieutenant-Governor's residence established there.

1840.—Formation of Wanganui settlement under the name of "Petre."

Feb. 12, 1841.—Issue of charter of incorporation to the New Zealand Company.

Mar. 31, 1841.—Arrival of first New Plymouth settlers.

May 3, 1841.—New Zealand proclaimed to be independent of New South Wales.

Oct., 1841.—Selection of site for settlement at Nelson.

Feb. 1, 1842.—Settlement founded at Nelson.

May 29, 1842.—Arrival of Bishop Selwyn in New Zealand

Sept. 10, 1842.—Death of Governor Hobson. Lieutenant Shortland, R.N., Colonial Secretary, became Acting-Governor until the arrival of Captain Fitzroy.

June, 1843.—Affray with Natives at the Wairau, and massacre by Rangihaeata of Captain Wakefield, R.N., agent at Nelson of the New Zealand Company, and others, who had surrendered.

Dec. 23, 1843.—Arrival of Captain Fitzroy, R.N., as Governor.

July 8, 1844.—The Royal flagstaff at Kororareka cut down by Heke.

March 10, 1845.—Attack on and destruction of Town of Kororareka by Heke.

Oct. 1, 1845.—Receipt of despatch notifying recall of Governor Fitzroy.

Nov. 14, 1845.—Arrival of Captain Grey, as Lieutenant-Governor of New Zealand, from South Australia.

Jan. 11, 1846.—Capture of pa at Ruapekapeka, Bay of Islands, and termination of Heke's war.

Mar. 3, 1846.—Commencement of Native hostilities in the Hutt Valley, near Wellington.

May 16, 1846.—Attack by Natives on a military outpost in the Hutt Valley.

July 23, 1846.—Capture of Te Rauparaha at Porirua, near Wellington. He was detained for a year as a prisoner on board a ship of war.

Aug. 28, 1846.—The New Zealand Government Act passed by the Imperial Parliament, under which a charter was issued dividing New Zealand into two provinces, and granting representative institutions.

May 19, 1847.—Attack by Natives on settlement of Wanganui.

Jan. 1, 1848.—Captain Grey sworn in as Governor-in-Chief over the Islands of New Zealand, also as Governor of the Province of New Ulster and Governor of the Province of New Munster.

Jan. 3, 1848.—Major-General Pitt appointed by Governor Grey to be Lieutenant-Governor of the Province of New Ulster.

Jan. 28, 1848.—Assumption by Lieutenant-Governor E. J. Eyre, at Wellington, of the administration of the Government of the Province of New Munster.

Feb. 21, 1848.—Peace ratified at Wanganui.

Mar. 7, 1848.—Suspension by Imperial statute of that part of the New Zealand Government Act which had conferred representative institutions.

Mar., 1848.—Otago founded by a Scotch company under the auspices of the Free Church of Scotland.

Oct., 1848.—Severe earthquake at Wellington.

July, 1850.—Surrender of the New Zealand Company's charter, all its interests reverting to the Imperial Government.

Dec., 1850.—Canterbury founded by the Canterbury Association in connection with the Church of England.

Jan. 8, 1851.—Death of Major-General Pitt, Lieutenant-Governor of the Province of New Ulster.

April 14, 1851.—Lieutenant-Colonel Wynyard appointed Lieutenant-Governor of the Province of New Ulster.

1852.—Discovery of gold at Coromandel by Mr. Charles Ring.

June 30, 1852.—The Constitution Act passed by the Imperial Parliament, granting representative institutions to New Zealand, and subdividing it into six provinces.

Jan., 1853.—Promulgation of the Constitution Act.

Mar. 7, 1853.—Assumption by Sir George Grey, K.C.B., of the duties of Governor of New Zealand, in terms of the appointment after the passing of the New Zealand Constitution Act, and cessation of the duties of the Lieutenant-Governors of New Ulster and New Munster.

Dec. 31, 1853.—Departure of Governor Sir George Grey.

Jan. 3, 1854.—Lieutenant-Colonel Wynyard assumed the administration of the Government.

May 27, 1854.—Opening at Auckland of the first session of the General Assembly by Lieutenant-Colonel Wynyard, Administrator of the Government.

Jan., 1855.—Very severe earthquake on each side of Cook Strait.

Sept. 6, 1855.—Arrival of Governor Colonel T. Gore Browne, C.B.

Nov. 12, 1855.—First members elected to House of Representatives under system of Responsible Government.

Aug. 8, 1855.—General Assembly opened.

Sept. 15, 1855.—General Assembly prorogued.

May 7, 1856.—Appointment of the first Ministry under the system of Responsible Government, under Mr. Sewell, Colonial Secretary.

May 14, 1856.—Defeat of Mr. Sewell's Ministry.

May 20, 1856.—Appointment of a Ministry under presidency of Mr. W. Fox, as Attorney-General.

May 28, 1856.—Defeat of Mr. Fox's Ministry, by a majority of one, on a direct vote of want of confidence.

June 2, 1856.—Appointment of a Ministry under the presidency of Mr. E. W. Stafford.

1857.—First payable goldfield in New Zealand opened at Collingwood, in the Nelson Province.

Aug. 21, 1858.—New Provinces Act passed.

Nov. 1, 1858.—Establishment of the Province of Hawke's Bay.

Dec. 22, 1858.—The Austrian exploring frigate "Novara" arrived in Auckland Harbour. Dr. Ferdinand von Hochstetter, at the request of the New Zealand Government, was commissioned to make geological surveys of the greater part of Auckland and Nelson Provinces.

March, 1859.—Te Teira offered land at Waitara for sale to the Government.

Nov. 1, 1859.—Establishment of the Province of Marlborough.

Mar., 1860.—Commencement of hostilities against Wiremu Kingi te Rangitake at Waitara.

Mar. 18, 1860.—Capture of Maori pa at Waitara.

Mar. 28, 1860.—Engagement at Waireka.

June 27, 1860.—Engagement of Puketakauere at Waitara.

Nov. 6, 1860.—Defeat at Mahoetahi, with heavy loss, of a force of Waikato Natives, who had crossed the Waitara River to join Wiremu Kingi.

Dec. 31, 1860.—Capture of the Matarikoriko Pa, and defeat of a large body of Waikato Natives.

Jan. 23, 1861.—The Natives made a determined attack on the redoubt at Huirangi occupied by Imperial troops, and were repulsed with heavy loss.

April 1, 1861.—Establishment of Province of Southland.

May 21, 1861.—A truce agreed to.

May, 1861.—Discovery of gold at Gabriel's Gully, Otago.

July 5, 1861.—Defeat of Mr. Stafford's Ministry, by a majority of one, on a vote of want of confidence.

July 12, 1861.—Appointment of a Ministry under the premiership of Mr. Fox.

July 29, 1861.—Incorporation of the Bank of New Zealand.

Sept. 26, 1861.—Arrival of Sir George Grey, K.C.B., at Auckland, from the Cape Colony, to succeed Governor Gore Browne. Sir George Grey was sworn in as Governor on the 3rd October.

Oct. 2, 1861.—Departure of Governor Gore Browne.

June 28, 1862.—Coromandel proclaimed a goldfield.

June 29, 1862.—Wreck of s.s. "White Swan" on East Coast (with loss of many public records, in transit from Auckland).

July 28, 1862.—Defeat of Mr. Fox's Ministry by the casting-vote of the Speaker, on a proposed resolution in favour of placing the ordinary conduct of Native affairs under the administration of the Responsible Ministers.

Aug. 6, 1862.—Appointment of a Ministry under the leadership of Mr. Alfred Domett.

Feb. 7, 1863.—Wreck of H.M.S. "Orpheus" on Manukau Bar: 181 lives lost.

Feb. 26, 1863.—Definite relinquishment by the Imperial Government of control over administration of Native affairs.

May 4, 1863.—Treacherous assault near Tataraimaka by Natives on a military escort. Murder of Lieutenant Tragett, Dr. Hope, and five soldiers of the 57th Regiment.

June 4, 1863.—Defeat of Natives at Katikara, by a force under Lieut.-General Cameron.

July 17, 1863.—Action at Koheroa, in the Auckland Province. Commencement of the Waikato War.

Oct. 27, 1863.—Resignation of the Domett Ministry, in consequence of difficulties experienced in connection with arrangements for finding a fitting representative of the Government in the Legislative Council.

Oct. 30, 1863.—Appointment of the Ministry formed by Mr. Fox, under the premiership of Mr. F. Whitaker.

Nov., 1863.—Acceptance by the General Assembly of colonial responsibility in Native affairs.

Nov. 20 1863.—Battle of Rangiriri. Defeat of Natives and unconditional surrender of 183.

Dec. 1, 1863.—The first railway in New Zealand opened for traffic by Mr. Samuel Bealey, Superintendent of Canterbury. The line was from Christchurch to Ferrymead Junction.

Dec. 3, 1863.—The New Zealand Settlements Act passed, giving the Governor power to confiscate the lands of insurgent Natives.

Dec. 8, 1863.—Occupation of Ngaruawahia. The British flag hoisted on the Maori king's flagstaff.

Feb. 11, 1864.—Engagement with Natives on Mangapiko River. Major (then Captain) Heaphy, of the New Zealand Forces, won the Victoria Cross for distinguished bravery on this occasion.

Feb. 22, 1864.—Defeat of Natives at Rangiaohia.

April 2, 1864.—Attack on and capture of pa at Orakau, Waikato.

April 21, 1864.—Engagement near Maketu, Bay of Plenty. Tribes of the Rawhiti defeated by Arawa Natives, under Captain McDonnell.

April 29, 1864.—Assault on Gate Pa, Tauranga, Bay of Plenty, and repulse of large British force by the Maoris. The pa was abandoned by the Natives during the following night.

April 30, 1864.—Repulse of attack by rebel Hauhau Natives on redoubt at Sentry Hill, Taranaki.

May 14, 1864.—Battle of Moutoa, an island in the Wanganui River, between friendly and rebel Hauhau Natives. Complete defeat of rebels.

June 21, 1864.—Engagement at Te Ranga, near Tauranga, by Lieut.-Colonel Greer, 68th Regiment. Severe defeat of the Natives.

1864.—Discovery of gold on the west coast of the South Island.

Sept. 10, 1864.—Escape of Maori prisoners from Kawau.

Oct. 3, 1864.—Wellington chosen as the seat of Government.

Nov. 24, 1864.—Appointment of a Ministry under the premiership of Mr. F. A. Weld, the Whitaker-Fox Ministry having resigned during the recess.

Dec. 17, 1864.—Confiscation of Native lands in Waikato by Sir George Grey.

Feb., 1865.—Removal of the seat of Government to Wellington.

March 2, 1865.—Barbarous murder of the Rev. Mr. Volkner, a Church of England missionary, at Opotiki, by Hauhau fanatics, under Kereopa.

June 8, 1865.—Submission of the Maori Chief Wiremu Tamihana te Waharoa (William Thompson).

June 17, 1865.—Murder of Mr. Fulloon, a Government officer, and his companions, at Whakatane, by Hauhau fanatics.

July 22, 1865.—Capture of the Wereroa Pa, near Wanganui.

Aug. 2, 1865.—Assault and capture of the Pa Kairomiromi, at Waiapu, by Colonial Forces under Captain Fraser, and Native Contingent under the chief Te Mokena. Eighty-seven rebels killed.

Sept. 2, 1865.—Proclamation of peace issued by Governor Sir George Grey, announcing that the war, which commenced at Oakura, was at an end.

Sept. 30, 1865.—Murder by Hauhaus, at Kakarama, of Mr. Broughton, when sent as friendly messenger to them by Brigadier-General Waddy.

Oct. 12, 1865.—Resignation of Mr. Weld's Ministry, on account of a resolution adverse to the Government policy, having been defeated only by the casting-vote of the Speaker.

Oct. 16, 1865.—Appointment of a Ministry under the premiership of Mr. E. W. Stafford.

Dec. 25, 1865.—Defeat of rebel Natives at Wairoa, Hawke's Bay, by Colonial Forces and Native Contingent.

Jan. 4, 1866.—Defeat of Natives at Okotuku Pa, on the west coast of the North Island, by force under Major-General Chute.

Jan. 7, 1866.—Assault on and capture of Putahi Pa, by force under Major-General Chute.

Jan. 13, 1866.—Assault on and capture of Otapawa Pa, by force under Major-General Chute.

Jan. 17, 1866, to Jan. 25, 1866.—Period of Major-General Chute's march through the bush to New Plymouth.

Jan., 1866.—Escape of a large number of Native prisoners from the hulk at Wellington; many were drowned in trying to swim ashore.

March 29, 1866.—Submission of the rebel chiefs Te Heuheu and Herekikie, of Taupo district.

Mar., 1866.—A detachment of Maori prisoners sent to the Chatham Islands.

June 15, 1866.—Commencement of Panama steam mail-service.

Aug. 26, 1866.—The Cook Strait submarine telegraph cable laid.

Oct. 2, 1866.—Engagement with rebel Natives at Pungarehu, West Coast, by Colonial Forces, under Major McDonnell.

Oct. 8, 1866.—First Act passed to impose stamp duties.

Oct. 12, 1866.—Defeats of rebel Natives at Oamaru and at Petane, Hawke's Bay, by Colonial Forces.

July, 1867.—Opening of Thames Goldfield.

Oct. 10, 1867.—An Act passed to establish an institute for the promotion of science and art.

Oct. 10, 1867.—An Act passed for the division of New Zealand into four Maori electorates, and the admission of four Maori members to the House of Representatives.

Jan., 1868.—Establishment of the County of Westland.

Feb. 5, 1868.—Arrival of Governor Sir George F. Bowen, G.C.M.G.

July 4, 1868.—Seizure by Maori prisoners, under the leadership of Te Kooti, of the schooner "Rifleman," and their escape from the Chatham Islands.

July 12, 1868.—Night attack by Natives on redoubt at Turuturu Mokai. Sub-Inspector Ross and seven Europeans killed. Natives driven off by the arrival of a force under Major Von Tempsky.

Aug. 8, 1868.—Pursuit by Lieut.-Colonel Whitmore of escaped Chatham Island prisoners, and indecisive engagement in the gorge of the Ruake Ture.

Aug. 21, 1868.—Attack on Ngutu-o-te-Manu by force under Lieut.-Colonel McDonnell. Defeat of Natives; four Europeans killed and eight wounded.

Sept. 7, 1868.—Engagement in bush at Ngutu-o-te-Manu. Major Von Tempsky, Captains Buck and Palmer, Lieutenants Hunter and Hastings, and fourteen men killed.

Oct. 19, 1868.—Bishop Selwyn left New Zealand.

Nov. 7, 1868.—Attack on Moturoa. Repulse of Colonial Forces, with severe loss.

Nov. 10, 1868.—Massacre of thirty-two Europeans at Poverty Bay by Te Kooti's band of Natives, who had escaped from the Chatham Islands.

Nov. 24, 1868. Dec. 3, 1868, Dec. 5, 1868.—Engagements between friendly Natives and rebels under Te Kooti, at Patutahi, Poverty Bay district.

Jan. 5, 1869.—Assault on and capture of Ngatapa Pa, Poverty Bay district, after a siege of six days, by the Colonial Forces of Europeans and friendly Natives under Colonel Whitmore and Major Ropata. Dispersion and pursuit of Te Kooti's band. More than 136 rebel Natives were killed.

Feb. 13, 1869.—Treacherous murder of the Rev. John Whitely and seven other Europeans at the White Cliffs, Taranaki.

Feb. 15, 1869.—Attack by rebel Natives on a foraging-party at Karaka Flat; one sergeant and six men killed.

Mar. 3, 1869.—Termination of Panama mail-service.

Mar. 13, 1869.—Attack on and defeat of Titokowaru's force at Otauto.

April 10, 1869.—Native pa at Mohaka taken by Te Kooti, who killed forty friendly Natives and several Europeans in the neighbourhood.

April 12, 1869.—First arrival of H.R.H. the Duke of Edinburgh in Wellington, in H.M.S. "Galatea."

May 6, 1869.—Surprise and capture of Ahikereru and Oamaru Teangi Pas, Waiwera country. Defeat of Te Kooti.

June 13, 1869.—Surrender to Major Noake and Mr. Booth, R.M., of the chief Tairua, with 122 men, women, and children of the Pakakohe Tribe, near Wanganui.

June 24, 1869.—Defeat of Mr. Stafford's Ministry on a want-of-confidence motion.

June 28, 1869.—Appointment of a Ministry under the premiership of Mr. W. Fox.

Sept. 3, 1869.—An Act passed providing Government life insurance and annuities.

Oct., 1869.—Seventy-four prisoners from the bands of Te Kooti and Titokowaru sentenced to death, after trial, for treason. The sentences of seventy-three were commuted to penal servitude for various terms.

Oct. 4, 1869.—Pourere Pa stormed and taken by Lieut.-Colonel McDonnell, with a mixed force of Europeans and Natives.

Jan., 1870.—Three hundred friendly Natives under Topia, and three hundred under Major Keepa (known as Kemp), started up the Wanganui River in pursuit of Te Kooti, who retreated into the Urewera country.

Jan. 25, 1870.—Capture of Tapapa Pa, occupied by Te Kooti.

Feb. 24, 1870.—The last detachment of the Imperial troops left New Zealand.

Mar. 25, 1870.—Major Keepa, with Native force, captured the position held by Te Kooti at Maraetahi, in Urewera country; nineteen rebels killed and seventy-three of Te Kooti's men taken prisoners. Te Kooti escaped with twenty followers.

Mar. 26, 1870.—Commencement of San Francisco mail-service.

June 28, 1870.—Enunciation in the House of Representatives of the public-works policy by the Colonial Treasurer, Mr. Vogel.

July, 1870.—Thirty prisoners of Te Kooti's band sentenced to death. The sentences were commuted to penal servitude.

Aug. 27, 1870.—Arrival in Wellington of H.R.H. the Duke of Edinburgh in H.M.S. "Galatea." Second visit.

Sept. 12, 1870.—An Act passed to establish the New Zealand University.

Sept. 12, 1870.—The Land Transfer Act passed, to simplify the title to land and dealings with real estates.

Oct. 6, 1870.—Southland Province reunited with Otago.

Dec. 5, 1870.—Honiani te Puni, the chief of the Ngatiawas, a staunch friend of the Europeans, died at Petone, near Wellington, aged ninety years.

Mar., 1871.—Commencement of railway-construction under the public-works policy.

Aug. 4, 1871.—Death of Tamati Waka Nene, the great Ngapuhi chief and friend of the Europeans.

Nov., 1871.—Capture of the notorious rebel Kereopa, the murderer of the Rev. Mr. Volkner, by the Ngatiporous.

Jan. 5, 1872.—Execution of Kereopa at Napier.

Jan., 1872.—Remission of sentences on fifty-eight Native prisoners then undergoing imprisonment for rebellion.

Feb. 22, 1872.—Visit of William King, the Maori chief of Waitara, to New Plymouth, and resumption of amicable relations with the Europeans.

May 9, 1872.—A general thanksgiving-day for the recovery of H.R.H. the Prince of Wales.

Sept. 6, 1872.—Defeat and resignation of Mr. Fox's Ministry.

Sept. 10, 1872.—Appointment of a Ministry under the premiership of the Hon. E. W. Stafford.

Oct. 4, 1872.—Defeat of the Stafford Ministry on a vote of want of confidence moved by Mr. Vogel.

Oct. 11, 1872.—Appointment of a Ministry under the premiership of the Hon. G. M. Waterhouse, M.L.C.

Oct. 11, 1872.—First appointment of Maori chiefs (two) to be members of the Legislative Council.

Oct. 25, 1872.—The Public Trust Office Act passed.

Jan., 1873.—Establishment of the New Zealand Shipping Company.

Mar. 3, 1873.—The Hon. W. Fox appointed Premier on the resignation of that office by the Hon. G. M. Waterhouse, the other members of the Ministry being confirmed in their offices.

Mar. 19, 1873.—Departure of Governor Sir G. F. Bowen, G.C.M.G.

Mar. 21, 1873.—Assumption of the Government by Sir G. A. Arney, Chief Justice, as Administrator.

April 8, 1873.—Resignation of the premiership by the Hon. W. Fox, on the return of the Hon. J. Vogel, C.M.G., from Australia. Appointment of Mr. Vogel as Premier, the other Ministers being confirmed in their offices.

June 14, 1873.—Arrival of Governor Sir J. Fergusson, P.C.

Aug. 22, 1874.—The Imprisonment for Debt Abolition Act passed.

Nov. 27, 1874.—Sir James Fergusson left New Zealand.

Dec. 3, 1874.—Arrival of Governor the Marquis of Normanby, P.C.

1874.—31,774 immigrants were introduced this year under the immigration and public-works policy.

Jan. 3, 1875.—Visit of Sir Donald McLean to the Maori king; resumption of amicable relations.

July 6, 1875.—Resignation of the Ministry, in consequence of the absence of Sir J. Vogel, K.C.M.G., in England, and his being unable to attend the session of Parliament. Reconstitution thereof, under the premiership of the Hon. Dr. Pollen, M.L.C.

July, 1875.—Establishment of the Union Steam Shipping Company of New Zealand.

1875.—18,324 immigrants were introduced this year under the immigration and public-works policy.

Oct. 12, 1875.—The Abolition of Provinces Act passed.

Feb. 15, 1876.—Resignation of the Hon. Dr. Pollen's Ministry, and reconstitution under the premiership of Sir J. Vogel, K.C.M.G.

Feb. 18, 1876.—Completion of the work of laying the telegraph cable between New Zealand and New South Wales.

June, 1876.—Death of Dr. Isaac Earl Featherston, while acting as Agent-General for New Zealand in England. He was the first to hold that office, and had previously been Superintendent of the Province of Wellington from the time of the first establishment of provincial representative institutions.

Sept. 1, 1876.—Resignation of Sir J. Vogel's Ministry in view of the appointment of Sir J. Vogel as Agent-General. Formation of a Ministry under the premiership of Major Atkinson.

Sept. 13, 1876.—Resignation of Major Atkinson's Ministry in consequence of doubts being entertained as to the constitutional position thereof. Reconstruction of the Ministry under the premiership of Major Atkinson.

Nov. 1, 1876.—The Abolition of Provinces Act, 1875, came into full operation. Complete abolition of provincial institutions. New Zealand subdivided into counties and municipal boroughs.

Oct. 8, 1877.—Defeat of the Atkinson Ministry on a vote of want of confidence moved by Mr. Larnach.

Oct. 15, 1877.—Appointment of a Ministry under the premiership of Sir George Grey, K.C.B.

Nov. 29, 1877.—The Education Act, providing for the free and compulsory education of children, passed.

April 11, 1878.—Bishop Selwyn died, in England.

Oct. 29, 1878.—Sir George Grey's first land-tax passed.

Feb. 29, 1879.—Departure of Governor the Marquis of Normanby, P.C.

Mar., 1879.—Removal of surveyors from the Waimate Plains by Natives acting under Te Whiti's orders.

Mar. 27, 1879.—Arrival of Governor Sir Hercules G. R. Robinson, G.C.M.G.

May 25, 1879.—The Natives from Parihaka, by order of Te Whiti, began ploughing up lands occupied by Europeans.

June, 1879.—Arrest and imprisonment of 180 of these Natives for causing disturbances.

July 29, 1879.—Defeat of the Grey Ministry on an amendment to the Address in Reply, moved by Sir William Fox, followed by a dissolution of Parliament.

Oct. 3, 1879.—Defeat and subsequent resignation of Sir George Grey's Ministry.

Oct. 8, 1879.—Appointment of a Ministry under the premiership of the Hon. John Hall.

Dec. 19, 1879.—An Act passed to assess property for the purpose of taxation.

Dec. 19, 1879.—The Triennial Parliament Act passed.

Dec. 19, 1879.—An Act passed to qualify every resident male of twenty-one years of age and upwards to vote.

June, 1880.—First portion of the Parihaka Maori prisoners released by the Government.

July 9, 1880.—Bounty Island taken possession of by Captain George Palmer, H.M.S. "Rosario."

Sept. 8, 1880.—Departure of Governor Sir Hercules G. R. Robinson, G.C.M.G.

Oct. 1880.—Release of the last portion of the Parihaka Maori prisoners.

Oct. 26, 1880.—Sir Francis Dillon Bell appointed Agent-General.

Nov. 29, 1880.—Arrival of Governor Sir A. H. Gordon, G.C.M.G.

April 29, 1881.—"Tararua," steamer, wrecked; 130 lives lost.

June 26, 1881.—Severe earthquakes in Wellington.

Nov. 5, 1881.—March of force of Constabulary and Volunteers on Parihaka, and arrest of Te Whiti and Tohu, without bloodshed.

Feb. 15, 1882.—First shipment of frozen meat made from Port Chalmers. (See Year-book, 1893, p. 192.)

April 21, 1882.—Resignation (during the recess) of the Hon. J. Hall's Ministry, and its reconstruction under the premiership of the Hon. F. Whitaker, M.L.C.

June 23, 1882.—Departure of Governor Sir A. H. Gordon.

June 24, 1882.—Assumption of the Government by Sir J. Prendergast Chief Justice.

Jan. 20, 1883.—Arrival of Governor Sir W. F. D. Jervois, G.C.M.G., C.B.

Jan. 26, 1883.—A direct line of steam-communication between England and New Zealand inaugurated by the New Zealand Shipping Company.

Feb. 13, 1883.—Proclamation of amnesty to Maori political offenders.

Feb. 19, 1883.—Liberation of Te Whiti and Tohu.

Sept. 25, 1883.—Resignation of the office of Premier and his seat in the Ministry by the Hon. F. Whitaker, and the appointment of the Hon. Major H. A. Atkinson to be Premier, the members of Mr. Whitaker's Ministry being confirmed in their offices.

June 11, 1884.—Defeat of Major Atkinson's Government.

June 27, 1884.—Dissolution of the General Assembly.

Aug. 16, 1884.—Resignation of Major Atkinson's Ministry in consequence of the result of the general election. Formation of a Ministry under the premiership of Mr. Robert Stout.

Aug. 20, 1884.—Defeat of Mr. Stout's Ministry by an amendment, expressive of want of confidence, to the Address in Reply being carried.

Aug. 28, 1884.—Appointment of a Ministry under the premiership of Major Atkinson.

Aug. 29, 1884.—Defeat of Major Atkinson's Ministry on a vote of want of confidence.

Sept. 3, 1884.—Appointment of a Ministry under the premiership of Mr. Robert Stout.

Nov. 8, 1884.—An Act passed to enable certain loans of the New Zealand Government to be converted into inscribed stock and the accrued sinking funds released.

Aug. 1, 1885.—The New Zealand Industrial Exhibition opened at Wellington.

June 10, 1886.—Volcanic eruptions at Tarawera, and destruction of the famed Pink and White Terraces; 101 lives lost.

May 28, 1887.—Defeat of Sir Robert Stout's Ministry.

July 15, 1887.—Dissolution of the General Assembly after prorogation, on the 10th June.

July 21, 1887.—A Proclamation issued declaring the Kermadec Islands to be annexed to and form part of New Zealand.

Aug. 17, 1887.—Kermadec Group annexed to New Zealand. Flag hoisted and proclamation read at Sunday Island.

Oct. 8, 1887.—Appointment of a Ministry under the premiership of Major H. A. Atkinson, Sir Robert Stout's Ministry having resigned in consequence of the result of the election.

Dec. 19, 1887.—An Act passed to reduce the number of members of the House of Representatives, after the expiration of the General Assembly then sitting, to seventy-four, including four Maori representatives.

Dec. 23, 1887.—The Australian Naval Defence Act, being an Act to provide for the establishment of an additional naval force on the Australian Station, at the joint charge of the Imperial and the several Colonial Governments, was passed by the New Zealand Legislature.

Oct. 27, 1888.—Formal Proclamation of British Protectorate of Cook Group of Islands, by Captain Bourke, R.N., of H.M.S. "Hyacinth."

Mar. 22, 1889.—Departure of Governor Sir W. F. D. Jervois, G.C.M.G., C.B.

Mar. 23, 1889.—Assumption of the Government by Sir James Prendergast.

May 2, 1889.—Arrival of the Earl of Onslow, G.C.M.G.

Sept. 2, 1889.—Electors prohibited by statute from voting in respect of more than one electorate at any election for the House of Representatives.

Nov. 26, 1889.—Opening of South Seas Exhibition, Dunedin.

Dec. 5, 1890.—First election of members of the House of Representatives under a practical manhood suffrage, and on the one-man-one-vote principle.

Jan. 24, 1891.—Notification by Governor of acceptance of resignation (during the recess) of the Hon. Sir H. A. Atkinson's Ministry. Appointment of a Ministry under the premiership of the Hon. John Ballance.

April 22, 1891.—Proclamation by Governor of New Zealand to inhabitants at Rarotonga of appointment of British Resident for the Protectorate of the Cook Islands.

May 25, 1891.—Adhesion of Australia to Postal Union.

Aug. 19, 1891.—Labour Laws: Passing of Employers' Liability Act 1882 Amendment Act.

Aug. 29, 1891.—Labour Laws: Passing of Truck Act, to prohibit payment of wages in goods or otherwise than in money.

Sept. 8, 1891.—Passing of Land and Income Assessment Act for purposes of taxation, and repeal of property-tax.

Sept. 21, 1891.—Labour Laws: Passing of an Act for supervising and regulating of factories and workrooms. [Repealed by Act of 1894.]

Jan. 19, 1892.—Electoral districts based on population as ascertained by the results of the census of 1891 proclaimed.

Feb. 2, 1892.—Departure of Governor the Earl of Onslow.

Feb. 25, 1892.—Assumption of the Government by Sir James Prendergast, Chief Justice.

June 7, 1892.—Arrival of Governor the Earl of Glasgow, G.C.M.G.

June 28, 1892.—Death of Sir H. A. Atkinson, K.C.M.G., Speaker of the Legislative Council, and previously four times Premier.

Oct. 1, 1892.—Labour Laws: Passing of Contractors' and Workmen's Lien Act.

Oct. 8, 1892.—Passing of Dairy Industry Act. [Repealed by Act of 1894.]

Oct. 11, 1892.—Passing of first Land-tax and Income-tax Act on the basis of the Assessment Act of previous year.

Oct. 11, 1892.—Land Act, 1892: Lease in perpetuity without revaluation system introduced; occupation with right of purchase; optional method of selection; small-farms associations.

Oct. 8 1892.—Land for Settlements Act, 1892, authorizing purchase of lands from individuals for purposes of subdivision. [Repealed by Act of 1894. See *post*.]

April 19, 1893.—Cheviot Estate taken over by Government under the Land and Income Assessment Act.

April 27, 1893.—Death of Hon. John Ballance, Premier of New Zealand.

May 1, 1893.—Resignation of the Ministry in consequence of the death of the Hon. John Ballance, and appointment of a new Ministry under the premiership of the Hon. R. J. Seddon.

June 23, 1893.—Death of Sir William Fox, K.C.M.G., four times Premier of New Zealand.

Sept. 2, 1893.—Passing of Bank-note Issue Act, to make bank-notes a first charge on assets and to enable the Government to declare them to be a legal tender, &c.

Sept. 8, 1893.—The Legislative Council of New Zealand passed, by a majority of two, the Bill conferring the franchise on women.

Sept. 14, 1893.—Banks and Bankers Act Amendment Act passed, to permit of increase of capital by issue of new shares.

Sept. 19, 1893.—The Electoral Act, 1893, extending franchise to women.

Oct. 2, 1893.—Alcoholic Liquors Sale Control Act passed. New licenses to be granted subject to the votes of the electors; reduction or abolition of licenses if desired.

Oct. 6, 1893.—Passing of Criminal Code Act, 1893.

Oct. 6, 1893.—Labour Laws: Passing of Workmen's Wages Act, 1893.

Oct. 6, 1893.—Native Land Purchase and Acquisition Act.

Oct. 20, 1893.—Sir James Prendergast appointed temporarily Deputy of the Governor.

Nov. 28, 1893.—A general election took place, being the first occasion on which women exercised the franchise.

Dec. 28, 1893.—Death of Right Rev. Dr. Henry John Chitty Harper, formerly Bishop of Christchurch and Primate of New Zealand.

Mar. 19, 1894.—Sir James Prendergast appointed temporarily Deputy of the Governor.

June 30, 1894.—Passing of Act to extend operation of Bank-note Issue Act, and another Act to control the transfer of bank shares.

June 30, 1894.—Bank of New Zealand Share Guarantee Act, 1894, to guarantee special issue of shares to amount of £2,000,000, and purchase of Assets Estates Company by Assets Board. [Amended on July 20.]

July 20, 1894.—Passing of an Act to limit number of bank directors and power of shareholders to transfer their shares.

Aug. 21, 1894.—Labour Laws: Passing of Conspiracy Law Amendment.

Aug. 31, 1894.—Labour Laws: Passing of an Act to encourage the formation of industrial unions and associations, and to facilitate the settlement of industrial disputes by conciliation and arbitration.

Oct. 18, 1894.—New Zealand Consols Act, 1894.

Oct. 18, 1894.—Government Advances to Settlers Act, 1894, for relief of settlers burdened by high charges of interest, &c.

Oct. 18, 1894.—Passing of Land for Settlements Act, 1894, authorizing acquisition of private lands for purposes of settlement, with compulsory powers, and repealing Act of 1892; also Lands Improvement and Native Lands Acquisition Act, 1894.

Oct. 18, 1894.—Labour Laws: Passing of Shops and Shop-assistants Act, 1894, for limiting hours of business in shops.

Oct. 23, 1894.—Passing of Banking Act, 1894.

Oct. 23, 1894.—Dairy Industry Act, to regulate manufacture of butter and cheese, with inspection and grading for export, and provide for purity of milk.

Oct. 28, 1894.—Wreck of s.s. "Wairarapa" at Great Barrier Island; 135 lives lost.

Mar. 29, 1895.—Death of Right Reverend Andrew Burn Suter, D.D., formerly Bishop of Nelson, and Primate of New Zealand.

May 27, 1895.—Government assumed management of the Midland Railway.

Aug. 3, 1895.—Death of C. W. Richmond, Puisne Judge of Wellington.

Aug. 20, 1895.—Trustees of cemeteries authorized to provide for cremation of dead.

Sept. 4, 1895.—Bank of New Zealand and Banking Act, 1895, providing for writing off paid-up capital with proceeds of first call on reserve liability; also for new capital and Assets Realization Board, &c.; also to purchase business of any other bank.

Sept. 20, 1895.—Labour Laws: Passing of an Act to regulate attachment of wages.

Sept. 20, 1895.—Labour Laws: Passing of Servants' Registry Office Act.

Sept. 20, 1895.—Family Homes Protection Act, 1895, to secure homes for the people and to prevent them from mortgage or sale for debt.

Oct. 18, 1895.—Amended tariff passed.

Oct. 31, 1895.—Bank of New Zealand and Banking Act Amendment Act: Sale of Colonial Bank business to Bank of New Zealand.

Dec. 20, 1895.—Appointment of Sir P. A. Buckley, K.C.M.G., as a Judge of Supreme Court.

Jan. 10, 1896.—Hon. W. P. Reeves appointed Agent-General in London.

Mar. 26, 1896.—Brunner Mine explosion; sixty-seven deaths.

April 12, 1896.—General census of New Zealand taken for Sunday night.

May 18, 1896.—Death of Sir Patrick Buckley, K.C.M.G.

July 11, 1896.—Appointment of Mr. W. B. Edwards as a Judge of the Supreme Court.

July 19, 1896.—Death of Hon. Robert Pharazyn, M.L.C.

Aug. 2, 1896.—Death of James Edward FitzGerald, C.M.G., Controller and Auditor-General.

Oct. 16, 1896.—Land for Settlements Act amended: Special provision made for disposal of highly improved lands acquired; preference given to landless people; Boards may select applicants, &c.

Oct. 17, 1896.—Alteration of franchise by abolition of non-residential or property qualification.

Oct. 17, 1896.—Government Valuation of Land Act passed.

Dec. 4, 1896.—General election of members of House of Representatives for the new districts as fixed by the Representation Commissioners on basis of census, 1896.

Feb. 6, 1897.—Departure of the Earl of Glasgow, G.C.M.G.

Feb. 8, 1897.—Sir James Prendergast Administrator of Government.

June 22, 1897.—Diamond Jubilee of reign of Her Majesty Queen Victoria.

Hon. R. J. Seddon, Premier of New Zealand, called to Privy Council, on occasion of his visit to England with contingent New Zealand Forces.

July 29, 1897.—Wreck of s.s. "Tasmania" at Mahia Peninsula; ten lives lost.

Aug. 10, 1897.—The Earl of Ranfurly assumed office as Governor.

Dec. 22, 1897.—Act to establish at Wellington the Victoria College, in connection with the New Zealand University.

July 15, 1898.—Hon. Sir Francis Dillon Bell, K.C.M.G., C.B., died.

1898.—Death of Sir George Grey, K.C.B.

1898.—Death of Bishop Selwyn, of Melanesia.

Oct. 15, 1898.—The Municipal Franchise Reform Act passed.

1898.—The Divorce Bill passed both Houses. Her Majesty's assent thereto gazetted 13th April, 1899.

Nov. 1, 1898.—An Act to provide for old-age pensions passed.

Feb. 10, 1899.—Rev. William Colenso died at Napier.

March 13, 1899.—Sir Julius Vogel, K.C.M.G., died.

April, 1899.—Victoria University College opened in Wellington.

May 25, 1899.—Resignation of Sir James Prendergast, Chief Justice.

June 1, 1899.—The Divorce Act, 1898, assented to by Her Majesty the Queen, came into operation.

June 22, 1899.—Sir Robert Stout, K.C.M.G., appointed Chief Justice.

Oct. 19, 1899.—Act passed constituting Labour Day. The second Wednesday in the month of October in each year to be a public holiday.

Oct. 21, 1899.—N.Z. Contingent (the first) consisting of 215 officers and men, left in s.s. "Waiwera" for Algoa Bay to assist the British in the Transvaal war.

Nov. 16, 1899.—General Assembly dissolved.

Dec. 6, 1899.—General Election of Members of House of Representatives.

Jan. 21, 1900.—The Second N.Z. Contingent (258 officers and men) left for South Africa in s.s. "Waiwera."

Feb. 5, 1900.—Hon. Thomas Dick died.

Feb. 17, 1900.—The Third N.Z. Contingent (264 officers and men) left for South Africa in s.s. "Knight Templar."

March 24 and 31, 1900.—The Fourth and Fifth Contingents (1,060 officers and men) left for South Africa in s.s.s. "Monowai," "Gymeric," "Waimate," and "Maori."

June 28, 1900.—Bubonic Plague Prevention Act, 1900, passed.

Aug. 8, 1900.—Immigration Restriction Act, 1899, assented to by Her Majesty in Council, came into operation.

Oct. 13, 1900.—Public Health Act passed.

Oct. 18, 1900.—The Maori Councils Act passed.

Oct. 20, 1900.—The Representation Act, 1900, passed, increasing number of European representatives to seventy-six.

Dec. 29, 1900.—Hon. Sir James Prendergast, Kt., appointed Deputy-Governor.

Jan. 1, 1901.—Universal penny postage adopted by New Zealand.

Jan. 22, 1901.—Queen Victoria died.

Jan. 28, 1901.—Accession of King Edward VII. proclaimed in New Zealand.

Jan. 30, 1901.—Sixth N.Z. Contingent (578 officers and men) sailed for South Africa in s.s. "Cornwall."

Feb. 14, 1901.—Death (in England) of Sir Edward Stafford, G.C.M.G., formerly three times Premier of New Zealand.

Feb. 21, 1901.—Appointment of Mr. Theo. Cooper as a Judge of the Supreme Court.

March 31, 1901.—General census of New Zealand taken for Sunday night.

April 6, 1901.—Seventh N.Z. Contingent (600 officers and men, rough-riders) sailed for South Africa, per s.s. "Gulf of Taranto."

May 22, 1901.—Deceased Husband's Brother Marriage Act came into operation after Royal assent.

June 10, 1901.—Duke and Duchess of Cornwall and York arrived in New Zealand.

June 10, 1901.—Boundaries of New Zealand extended to include Cook and other Pacific Islands.

Aug. 6, 1901.—Sir John McKenzie, K.C.M.G., died.

Nov. 7, 1901.—State Coal-mines Act passed.

Feb. 1, 1902.—North Island division of the Eighth N.Z. Contingent sailed from Auckland for South Africa per s.s. "Surrey."

Feb. 8, 1902. South Island division of the Eighth Contingent sailed from Lyttelton per s.s. "Cornwall."

March 12, 1902. South Island division of the Ninth N.Z. Contingent sailed from Port Chalmers for South Africa per s.s. "Kent."

March 19, 1902.—North Island division of the Ninth Contingent sailed from Auckland per s.s. "Devon."

March 24, 1902.—End of Pacific cable landed in Doubtless Bay, Mangonui.

April 14, 1902.—North Island division of the Tenth N.Z. Contingent sailed from Auckland for South Africa per s.s. "Drayton Grange."

April 14, 1902.—Right Hon. R. J. Seddon sailed for London to attend Conference of Colonial Premiers, and to represent New Zealand at His Majesty the King's Coronation.

April 19, 1902.—South Island division of the Tenth Contingent sailed for South Africa per s.s. "Norfolk."

June 26, 1902.—Death of Most Rev. Bishop William Garden Cowie, Primate of New Zealand.

Aug. 9, 1902.—Celebration in New Zealand on the occasion of the Coronation of His Majesty King Edward VII.

Aug. 1902.—Return of N.Z. troopers from South Africa (Eighth Contingent left Durban 5th July; Ninth, 9th July; Tenth, 15th July).

Nov. 5, 1902.—General Assembly dissolved.

Nov. 9, 1902.—Wreck of s.s. "Elingamite" on Three King's.

Nov. 25, 1902.—General Election of Members of House of Representatives.

Dec. 8, 1902.—Pacific (all red) Cable service opened for international business.

Dec. 31, 1902.—Export of frozen meat for year valued at £2,718,763.

Dec. 31, 1902.—Export of butter and cheese for year valued at £1,369,341.

Feb. 8, 1903.—Hon. W. Rolleston died.

Mar. 16, 1903.—Sir George Whitmore, K.C.M.G., died.

May 22, 1903.—Mahuta Tawhiao Potatau te Wherowhero (formerly known as the Maori King) summoned to the Legislative Council, and sworn in as a member of the Executive Council.

May 24, 1903.—Empire Day proclaimed in New Zealand (anniversary of birth of late Queen Victoria).

June 29, 1903.—Opening of Parliament (the fifteenth).

Sept. 11, 1903.—Mr. F. R. Chapman appointed a Judge of the Supreme Court.

Nov. 18, 1903.—State Fire Insurance Act passed.

Nov. 24, 1903.—Preferential and Reciprocal Trade Act passed.

Jan. 5, 1904.—Hon. W. C. Walker, C.M.G., died.

June 20, 1904.—Assumption of the Government of New Zealand by Lord Plunket.

July, 1904.—A team of riflemen, chosen from the Defence Force of New Zealand to represent New Zealand, was sent to England under the command of Lieut.-Colonel R. J. Collins, V.D., to compete at Bisley for the "Kolapore Imperial Challenge Cup," and succeeded in bringing the trophy to New Zealand.

March 23, 1905.—Death of Hon. Sir A. J. Cadman, Speaker, Legislative Council.

June 14, 1905.—Hon. W. P. Reeves appointed first High Commissioner for New Zealand at London.

July 29, 1905.—Old-age Pensions Act, 1905, passed, increasing amount of annual pension to £26.

Oct. 30, 1905.—Workers' Dwellings Act passed.

Nov. 29, 1905.—General Assembly dissolved.

Dec. 6, 1905.—General election of Members of House of Representatives

April 29, 1906.—General census of New Zealand.

June 10, 1906.—Death of the Right Hon. R. J. Seddon, P.C., Premier of New Zealand.

June 21, 1906.—Resignation of Ministry in consequence of the death of the Right Hon. R. J. Seddon, and appointment of a new Ministry under the Premiership of the Hon. W. Hall-Jones.

June 27, 1906.—Opening of Parliament (the sixteenth).

Aug. 6, 1906.—Resignation of Ministry under the Premiership of the Hon. W. Hall-Jones, and appointment of a new Ministry under the Premiership of the Hon. Sir J. G. Ward, K.C.M.G.

Aug. 21, 1906.—Opening of Parliament (second session of the sixteenth).

Oct. 29, 1906.—Government Advances to Workers Act passed to assist workers in providing homes for themselves.

Nov. 1, 1906.—Opening of the New Zealand International Exhibition at Christchurch.

Nov. 18, 1906.—Death of Hon. Albert Pitt, M.L.C., Attorney General, Colonial Secretary, and Minister of Defence.

April 15, 1907.—Opening of Conference of Premiers at London. New Zealand represented by Hon. Sir Joseph Ward, K.C.M.G.

April 15, 1907.—Closing of the New Zealand International Exhibition.

May 9, 1907.—Hon. Sir Joseph Ward, K.C.M.G., called to the Privy Council.

May 13, 1907.—Closing of the Conference of Premiers at London.

June 25, 1907.—Death of Sir John Hall, K.C.M.G., formerly Premier of New Zealand.

June 27, 1907.—Opening of third session of sixteenth Parliament.

Sept. 25, 1907.—Passing of The Tariff Act, 1907.

Sept. 26, 1907.—Style and designation of the "Colony of New Zealand" changed to "Dominion of New Zealand," by Royal Proclamation of 10th September, 1907.

Oct. 26, 1907.—Land and Income Assessment Act Amendment passed; graduated land-tax increased.

Nov. 20, 1907.—Land Laws Amendment Act passed; lease in perpetuity abolished and renewable lease with periodical revaluation established.

Dec. 11, 1907.—Parliament Buildings destroyed by fire.

June 29, 1908.—Opening of Parliament (fourth session of the sixteenth).

Aug. 4, 1908.—Consolidated Statutes Enactment Act passed.

Aug. 7, 1908.—First through train Wellington to Auckland.

Aug. 9, 1908.—American fleet of battleships visited Auckland.

Oct. 6, 1908.—New Zealand's subsidy to British Navy increased to £100,000 per annum.

Oct. 6, 1908.—Second Ballot Act passed.

Oct. 10, 1908.—Industrial Conciliation and Arbitration Amendment Act, 1908, passed. Boards of Conciliation abolished and Councils of Conciliation established.

Nov. 17, 1908.—General Election of Members of House of Representatives.

Dec. 7, 1908.—Purchase of Wellington-Manawatu Railway by General Government.

Feb. 12, 1909.—S.S. Penguin wrecked near Wellington. 75 lives lost.

Mar. 22, 1909.—New Zealand Government offers to the British Government at least one (and, if necessary, two) first-class battleships of the Dreadnought or latest types. Offer confirmed by Parliament on 14th June, 1909.

June 10, 1909.—Opening of Parliament (first session of seventeenth).

June 18, 1909.—Right Hon. Sir J. G. Ward, Prime Minister, sailed for London to attend Imperial Defence Conference.

Oct. 7, 1909.—Opening of Parliament (second session of seventeenth).

Dec. 24, 1909.—Land Settlement Finance Act passed. To assist associations of private buyers in the purchase of freehold lands.

May 6, 1910.—Death of King Edward VII.

May 10, 1910.—Accession of King George V proclaimed in New Zealand.

June, 20, 1910.—Arrival of His Excellency Lord Islington, Governor of New Zealand.

June 22, 1910.—Assumption of the Government of New Zealand by Lord Islington.

June 28, 1910.—Opening of Parliament (third session of seventeenth).

Sept. 28, 1910.—Public Debt Extinction Act passed. To authorize the creation of sinking funds for the extinction of the public debt.

Nov. 21, 1910.—National Provident Fund Act passed. To encourage the making of provision against destitution arising from old age, sickness, widowhood, and orphanage.

Nov. 21, 1910.—Commercial Trusts Act passed. For the repression of monopolies in trade and commerce.

Dec. 3, 1910.—Inalienable Life Annuities Act passed. To provide for the creation and issue of inalienable life annuities.

Dec. 3, 1910.—Workers' Dwellings Act passed. To make better provision for the erection, &c., of workers' dwellings.

Jan. 16, 1911.—William Alexander Sim, Esq., appointed a Judge of the Supreme Court.

March 6, 1911.—Departure of the Right Hon. Sir J. G. Ward, K.C.M.G., to attend the Imperial Conference and Coronation of King George.

April 2, 1911.—General census of New Zealand taken for Sunday night.

June 22, 1911.—Celebration in New Zealand on the occasion of the coronation of His Majesty King George V.

June 27, 1911.—Opening of Parliament (fourth session of seventeenth).

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